U.S. Department of Transportation Federal Aviation Administration Section 804 Collaborative Workgroup



Federal Aviation Administration National Facilities Realignment and Consolidation Report Parts 4 & 5 Recommendations

Response to U.S. Congress

Federal Aviation Administration Reauthorization Bill

Public Law 112-95

Section 804

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Executive Summary

Pursuant to Section 804 of the Federal Aviation Administration (FAA or Agency) Modernization and Reform Act of 2012 (P.L. 112-95), as amended by section 510 of the FAA Reauthorization Act of 2018 (P.L. 115-254), the Agency established a collaborative workgroup of representatives from the FAA, the National Air Traffic Controllers Association (NATCA) and the Professional Aviation Safety Specialists (PASS) labor unions to analyze the FAA's Terminal Radar Approach Control (TRACON) facilities for realignment.

The Section 804 collaborative workgroup conducts ongoing analysis of FAA Air Traffic Control facilities by gathering and reviewing operational and technical requirements for facilities undergoing analysis, considering existing Agency assets and inventory, considering workforce impacts, gathering and evaluating stakeholder input, and estimating costs and benefits of potential realignments.

The workgroup developed, validated, and presented its realignment recommendations to FAA and labor union leadership and drafted this report for the FAA Administrator's review and submission to the Federal Register and Congress.

The following recommendations are contained in this report:

- 1. Realign Reading, PA (RDG) TRACON operations to Harrisburg, PA (MDT) TRACON
- 2. Realign Bakersfield, CA (BFL) TRACON operations to Fresno, CA (FAT) TRACON
- 3. Realign Waterloo, IA (ALO) TRACON operations to Des Moines, IA (DSM) TRACON
- 4. Realign Binghamton, NY (BGM) TRACON operations and Elmira, NY (ELM) TRACON operations to Wilkes-Barre/Scranton, PA (AVP) TRACON
- 5. Realign Terre Haute, IN (HUF) TRACON operations to Indianapolis, IN (IND) TRACON
- 6. Sustain/maintain Rochester, MN (RST) TRACON operations at current site
- 7. Sustain/maintain Clarksburg, WV (CKB) TRACON operations at current site
- 8. Sustain/maintain Huntington, WV (HTS) TRACON operations at current site

Per statutory requirements, the sections below include the justification and details for the collaboratively-developed recommendations.

Introduction

Section 804 of the Federal Aviation Administration (FAA) Modernization and Reform Act of 2012 (P.L. 112-95), as amended by section 510 of the FAA Reauthorization Act of 2018 (P.L. 115-254), requires the FAA to develop a plan for realigning and consolidating facilities and services in an effort to reduce capital, operating, maintenance, and administrative costs, where such cost reductions can be implemented without adversely affecting safety.

To comply with Section 804 requirements, the FAA formed a collaborative workgroup with the National Air Traffic Controllers Association (NATCA) and the Professional Aviation Safety Specialists (PASS) labor unions. The workgroup developed a comprehensive process for facilities and service realignment analysis, and was chartered to conduct the analysis and to develop recommendations, considering the following factors:

- NextGen readiness of facilities
- Terminal Automation Modernization and Replacement (TAMR) program
- Operational and airspace factors
- Existing facility conditions
- Existing Agency assets
- Workforce impacts
- Industry stakeholder input
- Costs and benefits associated with each potential realignment alternative
- Facilities and engineering planning and priorities
- Employee career development

Per statutory requirements, the workgroup develops realignment recommendations in coordination with the FAA's Chief NextGen Officer and the Chief Operating Officer of the Air Traffic Organization (ATO), and the FAA Administrator approves all recommendations.

Section 804 Collaborative Workgroup

The Section 804 collaborative workgroup developed the criteria and guiding principles for evaluating and analyzing existing Terminal Radar Approach Control (TRACON) operations, capturing recommendations, and outlining next steps.

The workgroup developed a repeatable and defensible process to:

- Evaluate facility TRACON operations and prioritize for analysis
- Determine realignment scenarios and develop a set of alternatives for each scenario
- Collect facility and operational data, and document system requirements
- Document facility, equipment, infrastructure, operational, and safety data
- Capture qualitative workforce considerations, including training, transition, facility, and potential workforce impacts of potential realignments

- Consider potential impacts on operations, airspace modifications, route/fix changes, arrival/departure procedures, intra/inter-facility coordination, and pilot community interaction
- Collect and consider industry stakeholder input
- Quantify benefits and cost of potential realignments
- Develop a recommendation for each realignment scenario

Four-Step Process for Facilities Realignment Analysis

The four steps of the process developed by the workgroup are outlined below:



Section 804 Process for Facilities Realignment Analysis

The process serves as the platform for analyzing Air Traffic Control (ATC) facilities and services for potential realignments. To evaluate the realignment scenarios, the workgroup conducts working sessions at FAA headquarters, followed by site surveys at all facilities under analysis. At each facility, the workgroup leadership facilitates sessions with facility management, labor representatives, and stakeholders. The workgroup briefs stakeholders on the process and meetings are held to answer questions and collect input.

The workgroup's technical and operational experts evaluate the airspace, equipment, facility, operational, and safety factors for each alternative in the analysis, and document the findings in Systems Analysis and Requirements Documents (SARDs), which serve as the basis for subsequent business case analysis. The workgroup captures, documents, and reviews workforce impact considerations, and future staffing and training requirements prior to making recommendations.

Throughout each step of the analysis, the workgroup interfaces with multiple FAA programs and organizations to fully inform its analysis and provide regular updates. The workgroup continually improves its processes by reviewing lessons learned from previous realignments, eliciting feedback from the facilities undergoing analysis, and refining working activities.

Goals of Realignment

The Section 804 collaborative workgroup operates in conjunction with the Agency's NextGen deployment initiatives. The goal of realignment analysis is to reduce costs and modernize TRACON operations by optimizing the use of existing infrastructure and technology, while creating a more robust and resilient National Airspace System (NAS).

The Agency currently operates 163 individual TRACONs. The workgroup uses a collaborative process to effect modernization by pairing aging TRACONs with newer ones that have adaptable space and equipment, thereby optimizing infrastructure. Recommended realignments are intended to provide the following benefits:

- Creation of larger areas of contiguous airspace that will allow more dynamic and flexible airspace adjustments, potentially reducing handoffs and other coordinated activities
- Reduction of currently-existing complexities by merging airspace between two or more facilities
- Full integration of operations, which could result in additional staffing efficiencies beyond those identified in Section 804 business cases
- Single site maintenance and upgrades of future automation systems
- Enhanced career progression opportunities for relocated workforces by positioning them for success at facilities with greater volume and complexity
- Placement of more employees in modern facilities with state-of-the-art equipment that meet current standards and building codes

The workgroup additionally identifies unique benefits of individual realignment scenarios where possible. Realignment recommendations made as part of the Congressionally-mandated National Facilities Consolidation and Realignment reports will better position the NAS for future modernization. The recommendations will allow the Agency to evolve more effectively as technology shifts and traffic demands dictate change.

Report Scope

This report contains the details and results of analyzing 24 TRACON facilities (9 potential transfers and 16 potential receivers), which were identified for analysis using the collaboratively-developed process and criteria.

Analysis Scenarios

Initial analysis conducted by the workgroup encompassed TRACON facilities in the following scenarios:

- Realign Reading, PA (RDG) TRACON operations to Allentown/Lehigh Valley, PA
 (ABE) TRACON or Harrisburg, PA (MDT) TRACON, or sustain/maintain TRACON
 operations at the current site
- Realign Bakersfield, CA (BFL) TRACON operations to Santa Barbara, CA (SBA)
 TRACON or Fresno, CA (FAT) TRACON, or sustain/maintain TRACON operations at
 the current site

- Realign Waterloo, IA (ALO) TRACON operations to Des Moines, IA (DSM) TRACON or Cedar Rapids, IA (CID) TRACON, or sustain/maintain TRACON operations at the current site
- Realign Binghamton, NY (BGM) TRACON operations to Wilkes-Barre/Scranton, PA (AVP) TRACON or Syracuse, NY (SYR) TRACON, or sustain/maintain TRACON operations at the current site
- Realign Elmira, NY (ELM) TRACON operations to Binghamton, NY (BGM) TRACON, Rochester, NY (ROC) TRACON, or Syracuse, NY (SYR) TRACON, or sustain/maintain TRACON operations at the current site
- Realign Terra Haute, IN (HUF) TRACON operations to Indianapolis, IN (IND) TRACON or Champaign, IL (CMI) TRACON, or sustain/maintain TRACON operations at the current site
- Realign Rochester, MN (RST) TRACON operations to Minneapolis, MN (M98)
 TRACON or Waterloo, IA (ALO) TRACON, or sustain/maintain TRACON operations at
 the current site
- Realign Clarksburg, WV (CKB) TRACON operations to Pittsburgh, PA (PIT) TRACON or Charleston, WV (CRW) TRACON, or sustain/maintain TRACON operations at the current site
- Realign Huntington, WV (HTS) TRACON operations to Charleston, WV (CRW)
 TRACON or Covington, KY (CVG) TRACON, or sustain/maintain TRACON operations
 at the current site

Throughout the Section 804 analysis process, there are multiple decision points where the workgroup assessed each scenario and alternative for continuation in or removal from the process. Thus, some of the facilities listed above were removed from analysis. These facilities may be studied further in the future.

FAA Administrator's Recommendations

The following realignment recommendations are contained in this report:

- 1. Realign Reading, PA (RDG) TRACON operations to Harrisburg, PA (MDT) TRACON
- 2. Realign Bakersfield, CA (BFL) TRACON operations to Fresno, CA (FAT) TRACON
- 3. Realign Waterloo, IA (ALO) TRACON operations to Des Moines, IA (DSM) TRACON
- 4. Realign Binghamton, NY (BGM) TRACON operations and Elmira, NY (ELM) TRACON operations to Wilkes-Barre/Scranton, PA (AVP) TRACON
- 5. Realign Terre Haute, IN (HUF) TRACON operations to Indianapolis, IN (IND) TRACON
- 6. Sustain/maintain Rochester, MN (RST) TRACON operations at current site
- 7. Sustain/maintain Clarksburg, WV (CKB) TRACON operations at current site
- 8. Sustain/maintain Huntington, WV (HTS) TRACON operations at current site

Details for these realignment recommendations are provided in the sections below.

Recommendation #1: Realign Reading, PA (RDG) TRACON Operations to Harrisburg, PA (MDT) TRACON

The Section 804 workgroup evaluated RDG TRACON operations for realignment to Allentown/Lehigh Valley (ABE) TRACON or MDT TRACON.

Background

RDG tower/TRACON was constructed in 1966. The FAA owns and maintains the facility. RDG is an ATC level 6 facility and it operates from 0600-2400 each day. RDG TRACON operations in fiscal year (FY) 2016 were 88,421¹.

ABE tower/TRACON was constructed in 1995. The FAA owns and maintains the facility. ABE is an ATC level 7 facility and it operates 24 hours a day. ABE TRACON operations in FY 2016 were 122,275.

MDT tower/TRACON was constructed in 1989. The FAA owns and maintains the facility. MDT is an ATC level 7 facility and it operates 24 hours a day. MDT TRACON operations FY 2016 were 141,732.

Approach

The workgroup conducted a working session at FAA Headquarters with representatives from the potential transfer and receiver facilities, followed by stakeholder meetings and site surveys at RDG, ABE, and MDT.

¹ FAA Air Traffic Activity System (ATADS) was the source for all FY 2016 facility traffic counts quoted throughout this document.

Recommendation and Administrator's Justification

Upon applying the agreed-upon process and analysis, the workgroup recommends realigning TRACON operations from RDG to MDT tower/TRACON.

The realignment is expected to result in operational efficiencies and other benefits by creating airspace efficiencies, reducing point-outs, and enhancing coordination. The realignment would result in reduced coordination and more efficient use of airspace along the boundary between Reading, PA, and Harrisburg, PA. Departures at RDG may be more efficient due to unrestricted climbs. Realignment will eliminate the need for handoff of New York Air Route Traffic Control Center (ZNY) Lancaster, PA area departures to a second terminal facility.

MDT currently assumes control of RDG airspace between 0000-0600 (local time). MDT controllers are certified on the RDG airspace and understand RDG operations.

Projected Costs and Cost Savings

The economic analysis indicates the realignment of RDG TRACON operations to MDT yields a benefit-to-cost (B/C) ratio of 1.5 (\$9.9M/\$6.6M), representing a positive and relatively high return on investment, with a Net Present Value (NPV) of \$3.3M (\$9.9M-\$6.6M) over the analytical timeframe of 2017-2034. A B/C ratio of 1.5 means that for every \$1 invested, the financial benefit or return is \$1.5. In accordance with FAA and OMB guidance, costs have been risk adjusted to the 80% confidence level, which means there is an 80% probability that the project will be completed at or under the established baseline cost.

The results of the economic analysis are shown in the two tables below. Table 1 shows the costs of sustaining the current operations compared to realigning the facility. The costs in this table are presented in then-year (budget) dollars. Then-year dollars incorporate inflation to reflect the actual amount of money that will be required in the year it is needed. The Investment Facilities & Equipment (F&E) costs are \$2.9M to modify/sustain RDG and \$4.1M to realign RDG. Indirect F&E costs are listed separately in this table because they are paid by different FAA budgets instead of the facility realignment budget. Such costs frequently reflect ongoing costs that may be paid later in the life cycle; for example, this estimate includes costs of technology refreshment 10 years after its initial purchase. The Operations and Maintenance Costs reflected in the cost summary show the difference in personnel compensation and relocation costs between the two options.

Table 2 shows the lifecycle economic comparison of realignment costs to cost savings in realigning RDG to MDT in present value (discounted) dollars. The economic comparison that yields the net present value and benefit-to-cost ratio is calculated in present-value terms and identifies the cost of the investment in today's dollars. The realignment costs and savings in this table are the result of subtracting the modify/sustain case from the realignment case to yield either a cost or a benefit. The estimated \$6.6M in costs of the realignment are primarily comprised of increased staffing costs due to moving from an ATC level 6 facility to an ATC level 7 facility, equipment, and staff training and relocation. The estimated \$9.9M in cost savings expected from the realignment are due to staffing scheduling efficiencies, a reduction in staff locality pay, staffing savings achieved by a level adjustment of RDG Tower, and the avoidance of technology refreshment costs associated with RDG's automation system.

Cost Summary (Risk Adjusted, Then-Year Dollars, in		
Туре	Realign RDG to MDT	
Investment Facilities and Equipment (F&E) Total	\$2,851	\$4,059
Indirect F&E Total	\$3,964	\$902
Operations and Maintenance (O&M) Total	\$366,207	\$362,633

Economic Analysis Summary (Risk Adjusted, Present Value Dollars, in Thousands)				
Type Realign RDG t				
Realignment Costs	\$6,579			
Cost Savings or Avoidance	\$9,877			
Net Present Value (NPV)	\$3,299			
Benefit to Cost (B/C) Ratio	1.5			

Tables 1 and 2: Economic Analysis Summary for RDG

Note: The Cost Summary is presented in Then-Year (Budget) Dollars; the Economic Analysis Summary is presented in Present Value (Discounted) Dollars.

Recommendation #2: Realign Bakersfield, CA (BFL) TRACON Operations to Fresno, CA (FAT) TRACON

The Section 804 workgroup evaluated BFL TRACON operations for realignment to Santa Barbara (SBA) TRACON or FAT TRACON.

Background

BFL air traffic control tower (ATCT) was constructed in 1974 and the TRACON was established in 1981. The FAA owns and maintains the facility. BFL is an ATC level 6 facility and its hours of operation are 0600-2300. BFL TRACON operations in FY 2016 were 82,146.

SBA tower/TRACON was constructed in 1998. The FAA owns and maintains the facility. SBA is an ATC level 7 facility and its hours of operation are 0600-2300. SBA TRACON operations in FY 2016 were 146,287.

FAT ATCT was established in 1961 and the TRACON was established in 1974. The City of Fresno CA owns and maintains the facility. FAT is an ATC level 7 facility and it operates 24 hours a day. FAT TRACON operations in FY 2016 were 141,245.

Approach

The workgroup conducted a working session at FAA Headquarters with representatives from the potential transfer and receiver facilities, followed by stakeholder meetings and site surveys at BFL, SBA, and FAT.

Recommendation and Administrator's Justification

Upon applying the agreed-upon process and analysis, the workgroup recommends realigning BFL TRACON operations to FAT TRACON. The realignment is expected to result in operational efficiencies and other benefits.

Because of water leaks from an underground irrigation system, the current BFL tower/TRACON facility leans approximately seven inches (or a 0.55-degree tilt) due to foundation settlement. As a result, BFL was entered into Section 804 realignment analysis as an alternative to a potential tower/TRACON replacement. Since that time, FAA has taken steps to assure the continued stability of the tower. Although the lean issue caused BFL to be a priority, the facility would have been reviewed during the normal course of business.

BFL tower/TRACON is currently located in the tower shaft with very limited space, which is a building practice no longer utilized by the FAA. There is no simulation capability at BFL, which means the site cannot comply with national orders to provide simulation training. There is no conference or classroom space available.

Limited radar coverage for BFL requires procedures for approaches into Porterville Municipal Airport (PTV), Visalia Municipal Airport (VIS), and Mefford Field Airport (TLR). If these two airspaces were combined, there would be a reduction in inter-facility boundary coordination and improved radar coverage for the BFL area.

Coordination with the Oakland (ZOA) and/or Los Angeles (ZLA) Air Route Traffic Control Centers could be improved for FAT arrivals after realignment.

Some currently restricted departures could be improved by realigning BFL TRACON operations to FAT, and there could be improvement to routing based on improved radar coverage.

The realignment would result in reduced coordination and more efficient use of airspace over Bakersfield and Fresno, CA. During cloud seeding, there is a constant need for point-outs, with one facility regularly working well into the other's airspace. Realignment would be a benefit, as it would require less coordination and there would be less confusion during these operations.

Projected Costs and Cost Savings

The economic analysis indicates the realignment of BFL TRACON operations to FAT yields a benefit-to-cost (B/C) ratio of 1.2 (\$55M/\$44.2M), representing a positive return on investment, with a Net Present Value (NPV) of \$10.8M (\$55M-\$44.2M) over the analytical timeframe of 2017-2034. A B/C ratio of 1.2 means that for every \$1 invested, the financial benefit or return is \$1.2. In accordance with FAA and OMB guidance, costs have been risk adjusted to the 80% confidence level, there is an 80% probability that the project will be completed at or under the established baseline cost.

The analysis assumed that BFL tower and TRACON would be replaced for the reasons stated above; therefore, the legacy case includes costs for a new tower and an 11,500-square foot (s.f.) base building that houses BFL TRACON. The realignment option also includes a new tower for BFL, but a smaller base building of 9,500 s.f. for administrative use. Additionally, if the cost of replacing the tower is removed from consideration, the business case for realigning the TRACON to FAT remains positive with an NPV of \$3.2M and a B/C ratio of 1.7.

The results of the business case are shown in the two tables below. Table 3 shows the costs of sustaining the current operations compared to realigning the facility. The costs in this table are presented in then-year (budget) dollars. Then-year dollars incorporate inflation to reflect the actual amount of money that will be required in the year it is needed. The Investment Facilities & Equipment (F&E) costs are \$48.5M to modify/sustain BFL and \$42.5M to realign BFL. Indirect F&E costs are listed separately in this table because they are paid later in the life cycle; for

example, this estimate includes costs of technology refreshment 10 years after its initial purchase. The Operations and Maintenance costs reflected in the cost summary show the difference in personnel compensation and relocation costs between the options.

Table 4 shows the lifecycle economic comparison of realignment costs to cost savings in realigning BFL to FAT in present value (discounted) dollars. The economic comparison that yields the net present value and benefit-to-cost ratio is calculated in present-value terms and identifies the cost of the investment in today's dollars. The realignment costs and savings in this table are the result of subtracting the modify/sustain case from the realignment case to yield either a cost or a benefit. The estimated \$44.2M in costs of the realignment are the additional staffing costs caused by the facility level adjustment and staff training/transition. The estimated \$55M in cost savings are expected from the realignment are equipment savings, the avoidance of refreshing the automation system at BFL, savings realized by construction of a smaller building, staffing efficiencies, and eventual savings of the tower level adjustment. The locality adjustment savings from moving TRACON operations moves from BFL 27.65% locality area pay to FAT 14.85% locality area.

Cost Summary (Risk Adjusted, Then-Year Dollars, in Th		
Туре	Realign BFL to FAT	
Investment Facilities and Equipment (F&E) Total	\$48,541	\$42,519
Indirect F&E Total	\$14,212	\$7,824
Operations and Maintenance (O&M) Total	\$337,111	\$332,421

Economic Analysis Summary (Risk Adjusted, Present Value Dollars, in Thousands)		
Туре	Realign BFL to FAT	
Realignment Costs	\$44,218	
Cost Savings or Avoidance	\$54,970	
Net Present Value (NPV)	\$10,752	
Benefit to Cost (B/C) Ratio	1.2	

Tables 3 and 4: Economic Analysis Summary for BFL

Note: The Cost Summary is presented in Then-Year (Budget) Dollars; the Economic Analysis Summary is presented in Present Value (Discounted) Dollars.

Recommendation #3: Realign Waterloo, IA (ALO) TRACON Operations to Des Moines, IA (DSM) TRACON

The Section 804 workgroup evaluated ALO TRACON operations for potential realignment to DSM TRACON or Cedar Rapids, IA (CID) TRACON.

Background

ALO tower/TRACON was constructed in 1987. The FAA owns and maintains the facility. ALO is an ATC level 5 facility and its hours of operation are 0600-2000. ALO TRACON operations in FY 2016 were 25,928.

DSM tower/TRACON was established in 1976. The FAA owns and maintains the facility. DSM is an ATC level 7 facility and it operates 24 hours a day. DSM TRACON operations in FY 2016 were 98,589.

CID tower/TRACON was constructed in 1981. The FAA owns and maintains the facility. CID is an ATC level 6 facility and its hours of operation are 0500-2330. CID TRACON operations in FY 2016 were 60,741.

Approach

The workgroup conducted a working session at FAA headquarters with representatives from the potential transfer and receiver facilities, followed by stakeholder meetings and site surveys at ALO, DSM, and CID.

Recommendation and Administrator's Justification

Upon applying the agreed-upon process and analysis, the workgroup recommends realigning ALO TRACON operations to DSM TRACON. The realignment is expected to result in operational efficiencies and other benefits.

Realignment may increase the efficiencies of arrivals to DSM from the northeast and allow for smoother coordination due to the combined airspace.

ALO currently coordinates with DSM for arrivals into Marshalltown Municipal Airport (MIW), which is a satellite airport.

Projected Costs and Cost Savings

The economic analysis indicates the realignment of ALO TRACON operations to DSM yields a benefit-to-cost (B/C) ratio of 1.2 (\$8.8M/\$7.2M), representing a positive return on investment, with a Net Present Value (NPV) of \$1.6M, over the analytical timeframe of 2017-2034. A B/C ratio of 1.2 means that for every \$1 invested, the financial benefit or return is \$1.2. In accordance with FAA and OMD guidance, costs have been risk adjusted to the 80% confidence level, which means there is an 80% probability that the project will be completed at or under the established baseline cost.

The results of the business case are shown in the two tables below. Table 5 shows the costs of sustaining the current operations compared to realigning the facility. The costs in this table are presented in then-year dollars. Then-year dollars incorporate inflation to reflect the actual amount of money that will be required in the year it is needed. The Investment Facilities & Equipment (F&E) costs are \$2.9M to modify/sustain ALO and \$4.4M to realign ALO. Indirect F&E costs are listed separately in this table because they are paid by different FAA budgets instead of the facility realignment budget. Such costs frequently reflect ongoing costs that may be paid later in the life cycle; for example, this estimate includes costs of technology refreshment 10 years after its initial purchase. The Operations and Maintenance costs reflected in the cost summary show the difference in personnel compensation and relocations costs between the two options.

Table 6 shows the lifecycle economic comparison of realignment costs to cost savings in realigning ALO to DSM in present value (discounted) dollars. The economic comparison that yields the net present value and benefit-to-cost ratio is calculated in present-value terms and identified the cost of the investment in today's dollars. The realignment costs and savings in this

table are the result of subtracting the modify/sustain case from the realignment case to yield either a cost of a benefit. The estimated \$7.2M in costs of the realignment are equipment acquisition, staff training and relocation, and staffing cost adjustments for moving from an ATC level 5 facility to an ATC level 7 facility. The estimated \$8.8M in cost savings expected from the realignment are staffing scheduling efficiencies, savings from the eventual facility level adjustment of DSM tower, and the avoidance of tech refresh costs associated with refreshing ALO's automation system.

Cost Summary (Risk Adjusted, Then-Year Dollars, in		
Туре	Mod-Sustain ALO	Realign ALO to DSM
Investment Facilities and Equipment (F&E) Total	\$2,931	\$4,396
Indirect F&E Total	\$3,244	\$709
Operations and Maintenance (O&M) Total	\$288,732	\$287,182

Economic Analysis Summary (Risk Adjusted, Present Value Dollars, in Thousands)			
Type Realign ALO to			
Realignment Costs	\$7,182		
Cost Savings or Avoidance	\$8,792		
Net Present Value (NPV)	\$1,610		
Benefit to Cost (B/C) Ratio			

Tables 5 and 6: Economic Analysis Summary for ALO

Note: The Cost Summary is presented in Then-Year (Budget) Dollars; the Economic Analysis Summary is presented in Present Value (Discounted) Dollars.

Recommendation #4: Realign Binghamton, NY (BGM) TRACON Operations and Elmira, NY (ELM) TRACON Operations to Wilkes-Barre/Scranton, PA (AVP) TRACON

The Section 804 workgroup evaluated BGM TRACON operations for potential realignment to AVP TRACON or Syracuse, NY (SYR) TRACON.

The Section 804 workgroup simultaneously evaluated ELM TRACON operations for potential realignment to BGM TRACON; Rochester, NY (ROC) TRACON; or SYR TRACON.

Background

BGM tower/TRACON was constructed in 1951. The local airport authority owns the facility and the FAA operates it. BGM is an ATC level 5 facility and its hours of operation are 0600-2400. BGM TRACON operations in FY 2016 were 30,805.

ELM tower/TRACON was constructed in 1958. The local airport owns and maintains the facility. The FAA leases and operates it. ELM is an ATC level 5 facility and its hours of operation are 0600-02400. ELM TRACON operations in FY 2016 were 39,925.

AVP tower/TRACON was constructed in 2012. The FAA owns and maintains the facility. AVP is an ATC level 6 facility and it operates 24 hours a day. AVP TRACON operations in FY 2016 were 80,706.

ROC tower/TRACON was constructed in 1983. The FAA owns and maintains the facility. ROC is an ATC level 7 facility and it operates 24 hours a day. ROC TRACON operations in FY 2016 were 91,782.

SYR tower/TRACON was constructed in 1999. The FAA owns and maintains the facility. SYR is an ATC level 6 facility and it operates 24 hours a day. SYR TRACON operations in FY 2016 were 91,090.

Approach

The workgroup conducted a working session at FAA Headquarters with representatives from the potential transfer and receiver facilities, followed by stakeholder meetings and site surveys at BGM, ELM, AVP, ROC, and SYR.

Following the working session and site surveys, the Section 804 workgroup determined additional operational benefits could be derived if both transfer sites were realigned together and decided to add several realignment alternatives to the analysis. To this extent, BGM TRACON operations and ELM TRACON operations were considered for realignment together to ROC, SYR, or AVP TRACONs.

Recommendation and Administrator's Justification

Upon applying the agreed-upon process and analysis, the workgroup recommends realigning BGM TRACON operations and ELM TRACON operations to AVP TRACON. The realignment is expected to result in operational efficiencies and other benefits.

AVP is a new facility and currently an underutilized Agency asset. The realignment will allow the Agency to use AVP TRACON more efficiently and allow more employees to work in a newer, larger, NextGen-enabled, state-of-the-art facility that meets current facility standards and building codes.

Jointly realigning BGM and ELM TRACON operations to AVP would create a significantly larger area of airspace worked by a single facility. This would lead to a reduction in handoffs and more efficient coordination for controllers. Combining ELM and BGM airspace will reduce coordination in and around the Penn Yann, PA (PEO) airport. In addition, the realignment is expected to alleviate the current challenges related to servicing the ASR infrastructure at ELM.

Airspace would no longer be transferred to New York Air Route Traffic Control Center (ZNY) overnight, improving operations conducted at ZNY for the area. The expanded AVP facility will service up to 10,000 ft. altitude for the entire airspace creating additional operational efficiencies.

Input from BGM workforce indicated that the realignment of BGM and ELM TRACON operations to AVP would benefit from already closely tied operations across those three facilities.

Projected Costs and Cost Savings

The economic analysis indicates the realignment of BGM and ELM TRACON operations to AVP yields a benefit-to-cost (B/C) ratio of 1.1 (\$14.1M-\$13.2M) over the analytical timeframe of 2017-2034. A B/C ratio of 1.1 means that for every \$1 invested, the financial benefit or return is \$1.1. In accordance with FAA and OMB guidance, costs have been risk adjusted to the 80% confidence level, which means there is an 80% probability that the project will be completed at or under the established baseline cost.

The results of the business case are shown in the two tables below. Table 7 shows the costs of sustaining the current operations compared to realigning the facility. The costs in this table are presented in then-year (budget) dollars. Then-year dollars incorporate inflation to reflect the actual amount of money that will be required in the year it is needed. The Investment Facilities & Equipment (F&E) costs are \$5.4M to modify/sustain BGM and ELM and \$8.2M to realign BGM and ELM. Indirect F&E costs are listed separately in this table because they are paid by different FAA budgets instead of the facility realignment budget. Such costs frequently reflect ongoing costs that may be paid later in the life cycle; for example, this estimate includes costs of technology refreshment 10 years after its initial purchase. The Operations and Maintenance costs reflected in the cost summary show the difference in personnel compensation and relocation costs between the two options.

Table 8 shows the lifecycle economic comparison of realignment costs to cost savings in realigning BGM and ELM to AVP in present value (discounted) dollars. The economic comparison that yields the net present value and benefit-to-cost ratio is calculated in present-value terms and identifies the cost of the investment in today's dollars. The realignment costs and savings in this table are the result of subtracting the modify/sustain case from the realignment case to yield either a cost of a benefit. The estimated \$13.2M cost of the realignment is comprised of equipment, training, staff relocation, and the cost of the facility level adjustment for BGM and ELM to increase from ATC level 5 facilities to an ATC level 6 facility. The estimated \$14.1M in cost savings expected from the realignment are comprised of the avoidance of tech refreshing the automation systems at BGM and ELM, staffing savings resulting from scheduling efficiencies, and savings resulting from the eventual tower level adjustments at both BGM and ELM.

Cost Summary (Risk Adjusted, Then-Year Dollars, in		
	Realign	
Туре	BGM & ELM	BGM & ELM to AVP
Investment Facilities and Equipment (F&E) Total	\$5,365	\$8,234
Indirect F&E Total	\$6,538	\$1,554
Operations and Maintenance (O&M) Total	\$550,463	\$550,256

Economic Analysis Summary (Risk Adjusted, Present Value Dollars, in Thousands)			
Tyro			
Туре	BGM & ELM to AVP		
Realignment Costs	\$13,166		
Cost Savings or Avoidance	\$14,076		
Net Present Value (NPV)	\$910		
Benefit to Cost (B/C) Ratio	1.1		

Tables 7 and 8: Economic Analysis Summary for BGM and ELM

Note: The Cost Summary is presented in Then-Year (Budget) Dollars; the Economic Analysis Summary is presented in Present Value (Discounted) Dollars.

Recommendation #5: Realign Terre Haute, IN (HUF) TRACON Operations to Indianapolis, IN (IND) TRACON

The Section 804 workgroup evaluated HUF TRACON operations for potential realignment to IND TRACON or Champaign, IL (CMI) TRACON.

Background

HUF tower/TRACON was established in 1951. The local airport authority owns and maintains the facility. HUF is an ATC level 5 facility and it operates 24 hours a day. HUF TRACON operations in FY 2016 were 46,425.

IND tower/TRACON was established in 2006. The FAA owns and maintains the facility. IND is an ATC level 8 facility and it operates 24 hours a day. IND TRACON operations in FY 2016 were 252,756.

CMI tower/TRACON was constructed in 1960. The local airport owns and maintains the facility.. CMI is an ATC level 6 facility and its hours of operation are 0600-2300. CMI TRACON operations in FY 2016 were 51,765.

Approach

The workgroup conducted a working session at FAA Headquarters with representatives from the potential transfer and receiver facilities, followed by stakeholder meetings and site surveys at HUF, IND, and CMI.

Following the working session and site surveys, CMI was removed from further consideration as a potential receiver. The group based its decision on the following factors:

- Age and condition of facility
- Lack of administrative, operational, and technical support space

The decision to remove CMI as a receiver for this scenario was communicated to the facilities involved and analysis of CMI was discontinued.

Recommendation and Administrator's Justification

Upon applying the agreed-upon process and analysis, the workgroup recommends realigning HUF TRACON operations to IND TRACON. The realignment optimizes FAA assets, and is expected to result in operational efficiencies and other benefits.

Realignment would allow operational benefits, but, more importantly, would facilitate modernization of the NAS through making use of existing Agency assets by operating radar services from IND, which is a modern, state of the art facility that meets current FAA standards, and which has existing capacity, a facility backup engine generator, redundant HVAC, and a facility UPS.

HUF was built in 1951 and is beyond GSA guidelines for facility design life. HUF is not currently on the tower/TRACON replace list; however, it is one of the oldest facilities in the NAS and it will need to be replaced in the near future. Relocating TRACON operations will allow the Agency to build a smaller facility at a lower cost.

IND is a newer, underutilized facility with available space and unused positions. The realignment will allow the Agency to use IND TRACON more efficiently. Upon realigning, relocated HUF employees will operate in a NextGen-enabled, state-of-the-art facility that meets current standards and building codes.

Consolidation of the HUF and IND TRACON airspaces would allow for greater utilization of RNAV Optimum Profile Descent (OPD) procedures into the IND airport. The Runway 14 transition on the KOLTS TWO RNAV procedure was deleted because it required transition through the HUF airspace.

The airspace over the Bloomington, IN airport (BMG) currently is vertically divided between IND and HUF, creating inefficient use of this airspace. Consolidation of this vertically fractured airspace would result in reduced coordination and more efficient use of the airspace.

The IND ASR-9 radar system provides reliable and redundant coverage of both the HUF and BMG airports as well as much of the HUF TRACON airspace. The IND ASR-9 simultaneously provides six-level weather depiction to controllers on the STARS platform. HUF airspace is covered by an older ASR-8 Surveillance Radar system, which currently does not have the ability to simultaneously display all six levels of weather on the STARS platform. Controllers are required to manually switch between linear and circular polarization mode in order to view three levels of weather at a time. Consolidation would enable IND to gain access to the Huntingburg long range ARSR-4 surveillance radar.

Tech Ops closed the HUF Systems Support Center (SSC) several years ago and moved their personnel to IND. Tech Ops personnel currently commute to the HUF area to perform required periodic maintenance and when necessary equipment restoration. By moving the HUF TRACON operations and its associated equipment to IND, the need for Tech Ops personnel to commute to HUF would be reduced.

Due to their greater operational impact on the NAS, IND receives higher priority for equipment restoration when outages occur than HUF. By combining the HUF TRACON operations to IND, the HUF TRACON operations would enjoy the same priority of restoration as IND.

Projected Costs and Cost Savings

The economic analysis indicates the realignment of HUF TRACON operations to IND TRACON yields a benefit-to-cost ratio of 0.7 (\$7.8M/\$10.4M), representing a negative return on investment, and a Net Present Value (NPV) of -\$2.6M (\$7.8M-\$10.4) over the analytical timeframe of 2017-2034. In accordance with FAA and OMB guidance, costs have been risk-adjusted to the 80% confidence level, which means there is an 80% probability that the project will be completed at or under the established baseline cost.

The results of the economic analysis are shown in the two tables below. Table 9 shows the costs of sustaining the current operations compared to realigning the facility. The costs in this table are presented in then-year (budget) dollars. Then-year dollars incorporate inflation to reflect the actual amount of money that will be required in the year it is needed. The Investment Facilities & Equipment (F&E) costs are \$3.0M to modify/sustain HUF and \$4.6M to realign HUF. Indirect F&E costs are listed separately in this table because they are paid by different FAA budgets instead of the facility realignment budget. Such costs frequently reflect ongoing costs that may be paid later in the life cycle; for example, this estimate includes costs of technology refreshment 10 years after its initial purchase. The Operations and Maintenance costs reflected in the cost

summary show the difference in personnel compensation and relocation costs between the two options.

Table 10 shows the lifecycle economic comparison of realignment costs to cost savings in realigning HUF to IND in present value (discounted) dollars. The economic comparison that yields the net present value and benefit-to-cost ratio is calculated in present-value terms and identified the cost of the investment in today's dollars. The realignment costs and savings in this table are the result of subtracting the modify/sustain case from the realignment case to yield either a cost or a benefit. The estimated \$10.4M cost of the realignment is comprised of increased staffing costs caused by moving from an ATC level 5 facility to an ATC level 8 facility, additional equipment costs, and staff training and relocation. The estimated \$7.8M in cost savings expected from the realignment are staffing scheduling efficiencies and cost avoidance of tech-refreshing the automation system 10 years after its installation.

Cost Summary (Risk Adjusted, Then-Year Dollars, in Thousands)				
Type Mod-Sustain		od-Sustain HUF	Rea	lign HUF to IND
Investment Facilities and Equipment (F&E) Total	\$	3,008		
Indirect F&E Total	\$	3,337	\$	609
Operations and Maintenance (O&M) Total	\$	169,860	\$	173,932

Economic Analysis Summary (Risk Adjusted, Present Value Dollars, in Thousands)				
Type Realign HUF to				
Realignment Costs	\$10,434			
Cost Savings or Avoidance	\$7,788			
Net Present Value (NPV)	-\$2,647			
Benefit to Cost (B/C) Ratio	0.7			

Tables 9 and 10: Economic Analysis Summary for HUF

Note: The Cost Summary is presented in Then-Year (Budget) Dollars; the Economic Analysis Summary is presented in Present Value (Discounted) Dollars.

Recommendation #6: Sustain/Maintain Rochester, MN (RST) TRACON Operations at Current Site

The Section 804 workgroup evaluated RST TRACON operations for potential realignment to Minneapolis, MN (M98) TRACON or Waterloo, IA (ALO) TRACON.

Background

RST tower/TRACON was constructed in 1960. The local airport authority owns the facility and the FAA maintains it. RST is an ATC level 5 facility and its hours of operation are 0500-2300. RST TRACON operations in FY 2016 were 42,594.

M98 TRACON was constructed in 1996. The FAA owns and maintains the facility M98 is an ATC level 11 facility and it operates 24 hours a day. M98 TRACON operations in FY 2016 were 525.247.

ALO tower/TRACON was constructed in 1987. The FAA owns and maintains the facility ALO is an ATC level 5 facility and its hours of operation are 0600-2000. ALO TRACON operations in FY 2016 were 25,928.

Approach

The workgroup conducted a working session at FAA Headquarters with representatives from the potential transfer and receiver facilities, followed by stakeholder meetings and site surveys at RST, M98, and ALO.

Recommendation and Administrator's Justification

Upon applying the agreed-upon process and analysis, the workgroup recommends sustaining and maintaining RST TRACON operations at the current location.

While the workgroup can identify many operational benefits for realignment to M98, it is impossible to overcome the financial ramifications of realignment. Operational benefits of realignment of RST to M98 include reduced coordination and improved efficiencies for aircraft utilizing the BLUEM arrival to M98. RST tower operations would also be enhanced through the increased radar inputs being provided through M98, and more efficient use of airspace along the boundary between Rochester, MN, and Minneapolis, MN.

Additionally, because RST is a Terminal Approach Control in Tower Cab (TRACAB), and no TRACON space exists, no benefit would be achieved if the RST ATCT is eventually replaced.

Projected Costs and Cost Savings

The economic analysis indicates the realignment of RST TRACON operations to ALO provides a negative return-on-investment, with a B/C ratio of 0.9, and an NPV of -\$443K, given the analytical timeframe of 2017-2034. However, the aforementioned recommendation to realign ALO TRACON operations to DSM eliminates ALO as a potential receiver site for RST.

The economic analysis indicates the realignment of RST TRACON operations to M98 provides a negative return-on-investment, with a B/C ratio of 0.6 and an NPV of -\$6.6M, given the analytical timeframe of 2017-2034. A B/C ratio of 1 or above is considered positive. Costs have been risk adjusted to the 80% confidence level in accordance with FAA and OMB guidance.

Several operational benefits may result from a realignment to M98; however, economic analysis indicates a significantly negative NPV for this realignment alternative. Substantial costs are associated with increasing the facility level and locality pay from RST (ATC level 5; 14.35% locality pay) to M98 (ATC level 11; 21.30% locality pay).

Table 11 shows the costs of sustaining the current operations compared to realigning the facility. The costs in this table are presented in then-year (budget) dollars. Then-year dollars incorporate inflation to reflect the actual amount of money that will be required in the year it is needed. The Investment Facilities & Equipment (F&E) costs are \$2.8M to modify/sustain RST nearly \$4M to realign to ALO, and \$4.1M to realign to M98.

Table 12 shows the lifecycle economic comparison of realignment costs to cost savings in realigning RST to ALO or M98 in present value (discounted) dollars.

The primary costs of the RST TRACON realignment to ALO are equipment, training, staff relocation, and staffing. Staffing inefficiencies between RST and ALO require adding a certified professional controller.

The cost drivers of the realignment to M98 include equipment, training, staff relocation, and staffing increases arising from increased facility level, increased locality, and an addition of a frontline manager.

The primary cost benefits and cost savings expected from the realignment to either ALO or M98 are the avoidance of tech refreshing the automation system at RST and the eventual staffing savings from the RST tower level adjustment. In addition, realignment to M98 yields some staffing efficiencies in the controller workforce and the traffic management unit.

Cost Summary (Risk Adjusted, Then-Year Dollars, in Thousands)			
Туре	Mod-Sustain RST	Realign RST to ALO	Realign RST to M98
Investment Facilities and Equipment (F&E) Total	\$2,836	\$3,984	\$4,116
Indirect F&E Total	\$3,447	\$727	\$725
Operations and Maintenance (O&M) Total	\$523,087	\$524,767	\$533,083

Economic Analysis Summary (Risk Adjusted, Present Value Dollars, in Thousands)		
Туре	Realign RST to ALO	Realign RST to M98
Realignment Costs	\$6,053	\$16,394
Cost Savings or Avoidance	\$5,610	\$9,783
Net Present Value (NPV)	-\$443	-\$6,611
Benefit to Cost (B/C) Ratio	0.9	0.6

Tables 11 and 12: Economic Analysis Summary for RST

Note: The Cost Summary is presented in Then-Year (Budget) Dollars; the Economic Analysis Summary is presented in Present Value (Discounted) Dollars.

Recommendation #7: Sustain/Maintain Clarksburg, WV (CKB) TRACON Operations at Current Site

The Section 804 workgroup evaluated CKB TRACON operations for potential realignment to Pittsburgh, PA (PIT) TRACON or Charleston, WV (CRW) TRACON.

Background

CKB TRACON was constructed in 1986. The FAA owns and maintain the facility. CKB is an ATC level 5 facility and its hours of operation are 0700-2300. CKB TRACON operations in FY 2016 were 42,491.

CRW TRACON was constructed in 1956. The local airport authority owns the facility and the FAA maintains it. CRW is an ATC level 5 facility and it operates 24 hours a day. CRW TRACON operations in FY 2016 were 67,873.

PIT TRACON was constructed in 1985. The FAA owns and maintains the facility. PIT is an ATC level 9 facility and it operates 24 hours a day. PIT TRACON operations in FY 2016 were 260,171.

Approach

The workgroup conducted a working session, site surveys, and stakeholder meetings with representatives from the potential transfer and receiver facilities at CKB, CRW, and PIT.

Recommendation and Administrator's Justification

Upon applying the agreed-upon process and analysis, the workgroup recommends sustaining and maintaining CKB TRACON operations at the current location.

Projected Costs and Cost Savings

The economic analysis indicates the realignment of CKB TRACON operations to either CRW or PIT provides a negative return-on-investment, with a B/C ratio of 0.3 and 0.4, respectively, and an NPV of about -\$8.8M and nearly -\$6.0M, given the analytical timeframe of 2017-2034. A B/C ratio of 1 or above is considered positive.

The largest cost of realignment in both scenarios is associated with staffing pay raises due to facility level adjustments. If CKB moves to CRW (both ATC level 5 facilities), CRW's level would increase to ATC level 6, thereby causing both facilities to experience pay increases. CKB (ATC level 5) moving to PIT (ATC level 9) would result in a significant increase. Additionally, CKB personnel moving to PIT would also be entitled to additional locality pay (15.06% to 17.78%). Neither realignment option is expected to result in any staffing scheduling efficiencies to offset these increases.

Table 13 shows the cost of sustaining the current operations compared to realigning the facility. The costs in this table are presented in then-year (budget) dollars. Then-year dollars incorporate inflation to reflect the actual amount of money that will be required in the year it is needed. The Investment Facilities & Equipment (F&E) costs are \$0 for the modify/sustain alternative, approximately \$2.0M to realign to CRW and more than \$2.2M to realign to PIT.

Table 14 shows the lifecycle economic comparison of realignment costs to cost savings in realigning CKB to CRW or PIT, in present value (discounted) dollars.

The primary benefits and cost savings expected from the realignment to either PIT or CRW are the avoidance of tech refreshing the automation system at CKB and the eventual minor staffing savings from the CKB tower level adjustment.

Cost Summary (Risk Adjusted, Then-Year Dollars, in Thousands)			
Туре	Mod-Sustain CKB	Realign CKB to CRW	Realign CKB to PIT
Investment Facilities and Equipment (F&E) Total	•	2,045	2,262
Indirect F&E Total	3,879	1,736	1,691
Operations and Maintenance (O&M) Total	471,418	479,659	484,725

Economic Analysis Summary (Risk Adjusted, Present Value Dollars, in Thousands)		
Туре	Realign CKB to CRW	Realign CKB to PIT
Realignment Costs	9,964	14,142
Cost Savings or Avoidance	3,225	3,225
Net Present Value (NPV)	-\$6,739	-\$10,917
Benefit to Cost (B/C) Ratio	0.3	0.2

Tables 13 and 14: Economic Analysis Summary for CKB

Note: The Cost Summary is presented in Then-Year (Budget) Dollars; the Economic Analysis Summary is presented in Present Value (Discounted) Dollars.

Recommendation #8: Sustain/Maintain Huntington, WV (HTS) TRACON Operations at Current Site

The Section 804 workgroup evaluated HTS TRACON operations for potential realignment to CRW or Covington, KY (CVG) TRACON.

Background

HTS TRACON was constructed in 1986 (the building was built in 1952). The local airport authority owns the facility and the FAA maintains it. HTS is an ATC level 5 facility and it operates 24 hours a day. HTS TRACON operations in FY 2016 were 37,907.

CRW TRACON was constructed in 1956. The local airport authority owns the facility and the FAA maintains it. CRW is an ATC level 5 facility and it operates 24 hours a day. CRW TRACON operations in FY 2016 were 67,873.

CVG TRACON was constructed in 1998. The FAA owns and operates the facility. CVG is an ATC level 8 facility and it operates 24 hours a day. CVG TRACON operations in FY 2016 were 230,738.

Approach

The workgroup conducted a working session, site surveys, and stakeholder meetings with representatives from the potential transfer and receiver facilities at HTS, CRW, and CVG.

Recommendation and Administrator's Justification

Upon applying the agreed-upon process and analysis, the workgroup recommends sustaining and maintaining HTS TRACON operations at the current location.

Projected Costs and Cost Savings

The economic analysis indicates the realignment of HTS TRACON operations to either CRW or CVG provides a negative return-on-investment, with a B/C ratio of 0.3 or 0.4, respectively, and an NPV of -\$8.8M and nearly -\$6.0M given the analytical timeframe of 2017-2034. A B/C ratio of 1 or above is considered positive.

Table 15 shows the costs of sustaining the current operations compared to realigning the facility. The costs in this table are presented in then-year (budget) dollars. Then-year dollars incorporate inflation to reflect the actual amount of money that will be required in the year it is needed. The Investment Facilities & Equipment (F&E) costs are \$0 for the modify/sustain alternative, nearly \$2.0M to realign to CRW and about \$2.3M to realign to CVG.

Table 16 shows the lifecycle economic comparison of realignment costs to cost savings in the realigning HTS to CRW or CVG, in present value (discounted) dollars.

Additionally, the workgroup considered the alternative of realigning both CKB and HTS to CRW, which has the space for both operations, but the economic analysis indicates realignment of CKB and HTS TRACON operations to CRW provides a negative return-on-investment, with a B/C ratio of 0.5 and an NPV of -\$8.5M, given the analytical timeframe of 2017-2034. Costs have been risk adjusted to the 80% confidence level in accordance with FAA and OMB guidance.

Table 17 reflects the costs in then-year (budget) dollars. The Investment Facilities & Equipment (F&E) costs are \$0 for the modify/sustain alternative, nearly \$4.0M to realign both CKB and HTS to CRW.

Table 18 shows the lifecycle economic comparison of realignment costs to cost savings in realigning both CKB and HTS to CRW, in present value (discounted) dollars.

The primary costs of the HTS TRACON realignment to CRW or CVG, or of the combination realignment of CKB and HTS to CRW are equipment, training, staff relocation, and staffing. The largest cost of realignment in these scenarios is associated with staffing pay raises due to facility level adjustments. If HTS moves to CRW (both are ATC level 5 facilities), CRW's level would increase to ATC level 6, thereby causing both facilities to experience pay increases. The same applies for CKB in the combination option. HTS (ATC level 5) moving to CVG (ATC level 8) also results in a significant increase. Additionally, HTS personnel moving to CVG would also be entitled to additional locality pay (15.06% to 19.52%).

The primary benefits and cost savings expected from the realignment to either CRW or CVG are the avoidance of tech refreshing the automation system at HTS. Additionally, there are some staffing scheduling efficiencies associated with HTS realigning to CVG.

Cost Summary (Risk Adjusted, Then-Year Dollars, in Thousands)			
Туре	Mod-Sustain HTS	Realign HTS to CRW	Realign HTS to CVG
Investment Facilities and Equipment (F&E) Total	-	1,945	2,327
Indirect F&E Total	3,896	1,800	1,794
Operations and Maintenance (O&M) Total	467,145	478,107	474,028

Economic Analysis Summary (Risk Adjusted, Present Value Dollars, in Thousands)		
Туре	Realign HTS to CRW	Realign HTS to CVG
Realignment Costs	12,039	10,867
Cost Savings or Avoidance	3,211	4,885
Net Present Value (NPV)	-\$8,828	-\$5,982
Benefit to Cost (B/C) Ratio	0.3	0.4

Tables 15 and 16: Economic Analysis Summary for HTS

Note: The Cost Summary is presented in Then-Year (Budget) Dollars; the Economic Analysis Summary is presented in Present Value (Discounted) Dollars.

Cost Summary (Risk Adjusted, Then-Year Dollars, in Thousands)		
	Mod-Sustain CKB	Realign CKB and HTS
Туре	and HTS	to CRW
Investment Facilities and Equipment (F&E) Total	-	3,972
Indirect F&E Total	6,423	2,904
Operations and Maintenance (O&M) Total	333,144	342,683

Economic Analysis Summary (Risk Adjusted, Present Value Dollars, in Thousands)		
Type		Realign CKB and HTS to CRW
Realignment Costs		15,871
Cost Savings or Avoidance		7,420
Net Present Value (NPV)		-\$8,451
Benefit to Cost (B/C) Ratio		0.5

Tables 17 and 18: Economic Analysis Summary for the CKB and HTS Combination Realignment

Note: The Cost Summary is presented in Then-Year (Budget) Dollars; the Economic Analysis Summary is presented in Present Value (Discounted) Dollars.

Proposed Timing for Implementation of Recommendations

The implementation of facility and operational realignments and staff moves are subject to current labor and FAA collective bargaining agreements, which require notification to the workforce of up to 12 months, as well as other FAA policies and regulations. The FAA currently plans to notify the workforce of the recommendations in 2019, initiate project implementation in 2019, and begin cutovers in 2021. Implementation of each realignment is contingent on funding and resource availability.

Federal Register Publication

In accordance with Section 804 of P.L. 112-95, the FAA published the National Facilities Realignment and Consolidation Report, Parts 4 & 5 in the Federal Register for public review and comment from March 19 through May 3, 2019. The Agency received about 90 comments and they are included as an addendum to this report.

Conclusion

The realignment recommendations outlined in this report are the result of a collaborative process which involved a multi-disciplinary workgroup of representatives from FAA management, labor, field facilities, finance, and subject matter experts.

The repeatable and defensible process developed by the workgroup served as a stable foundation for realignment analyses and recommendations that may be developed in the future. The workgroup used the process to maximize operational, administrative, and maintenance efficiencies and deliver the highest value to stakeholders.

Through continuous analysis and assessment of facilities through this process, the FAA supported its goal of ensuring safe and secure operations across the nation.

The FAA's success in conducting realignment analysis, continuing to develop realignment recommendations, and implementing those realignments is contingent upon stable multi-year funding, continued collaboration with labor unions, and coordination with industry stakeholders.

Addendum

Federal Register Comments

Public comment period: 03/19/19- 05/03/19

COMMENT	AUTHOR		
RDG COMMENTS			
As a pilot and GA plane owner based at RDG, I'm opposed to moving our approach control to Harrisburg. The collaborative efforts of Tower/Approach control is much better when real live people work beside each-other. Given the fact that the airspace in both Harrisburg and Reading can get fairly busy, I can't imagine that savings of combining operations. I will be significant enough to justify the decrease in services. Please keep our approach control local.	CS		
As a pilot based out of the Reading Airport, I will say that this makes absolutely no sense for this airport. The system as it is works very well, and I see no way that the proposed changes would help it. The things mentioned in the act are negligible and are far outweighed by the difficulties that will be brought on by the changes. The financial savings mentioned are also laughable. If you are trying to make life better for me as a pilot, you failed. If you are trying to save money, you failed. Please don't do this to us!	Anonymous		
The Reading, Pennsylvania Airport (RDG) traffic control tower enjoys the unique circumstance of having both the tower operator and approach controller sitting in close voice proximity to each other. This allows for positive direct communication between them resulting in a much safer aircraft operating environment then having the tower operator need to communicate with the approach controller via telephone. In addition this direct contact arrangement allows for faster handling of clearances resulting in fewer delays. Recoating the approach control function to another airport makes no sense and reduces safety.	John Phillips 1007 Rill Rd Reading, PA 19606		
I am concerned that there will be a decline in safety due to this proposed change. As an instrument-rated pilot based at the Reading, PA airport, KRDG, I frequently use approach/departure control for IFR practice and flights to and from the area. The hand-off between tower and app/dep is seamless at KRDG which gives me great confidence in the clearances I receive. The proposed change, as I understand it, would require additional coordination between the KRDG tower ATC and a remotely located app/dep controller via telephone. How can this a better and safer situation? Although this is done at many other airports, it seems counterproductive to	Dale Litwhiler 1051 North Church Rd Sinking Spring, PA 19608		

intentionally reduce the safety level at airports which do have app/dep co- located with tower and ground to save what appears to be a minimal amount of money. How much does safety cost? Thank you for considering my concerns in your decision-making process.	
As an instrument rated commercial pilot based at Reading, PA (KRDG) I find the proposed changes disturbing. I frequently do actual and practice IFR approaches at KRDG and other local fields. KRDG ATC service is excellent and rapid as they have direct face-to-face contact between the approach and tower controllers. There are no delays as occurs when contact has to be established with a remote facility and the local controller is off air on the telephone. I don't see how using an approach controller some 50 miles away will improve their communications or my safety. In fact, I have experienced on several occasions the failure of the controller I have been working with to establish contact with the next controller leaving me in limbo until I can establish radio contact as a pop-up aircraft; not very safe in or near busy airspace. As the airspace gets busier and controllers get fewer I see a major problem coming. I understand these changes are primarily to save money as determined when KRDG was a class 5 tower. The recent KRDG downgrade to Class 4 eliminates, or will soon eliminate, a portion of these small savings. Another inconsistency is trying to obtain these shrinking savings when only a couple years ago large sums of money were invested at KRDG to upgrade the approach radar system. I believe the FAA has a major mandate to keep our airspace safe and I fail to understand how these changes will help accomplish that.	Guy Wicks 858 Summer Mountain Rd Bernville, PA 19506
I am regular user of the RDG ATCT/TRACON facility, I am not in support of the proposed changes of discontinue RDG radar services with Harrisburg approach. It would cause considerable delays and safety burdens for VFR traffic who are the majority of traffic using the local air space.	Timothy Earnest157 Orchard Rd Reading, PA 19605
I for one, do not feel as though the Reading Airport, its pilots or passengers using this airfield are best served by this action. The number of training flights daily coupled with the outstanding advisories given by the Reading Approach control provide a level of safety that should not be overlooked. While I recognize that there is a small margin of savings associated with this action, I feel it pales in comparison to the safety afforded at this site.	Timothy Mead 23 Jennifer Dr Bernville, PA 19506
As a pilot who achieved my PPL at Reading (KRDG), and am now in training for my instrument rating, I can tell you from my own experience that the level of safety and coordination at KRDG is unprecedented. Having the approach controllers and tower controllers in the same facility greatly increases safety, provides greater flexibility for non-standard approaches/departures, and decreases the amount of time needed to receive	ER

clearances. The controllers at KRDG are very familiar with the surrounding area, enabling them to better advise and assist pilots in emergency situations. Combining KRDG TRACON with Harrisburg will significantly increase the workload on the Harrisburg controllers, which will decrease overall safety. Please do NOT move our TRACON to a different facility.

To whom it may concern:

I hope this letter gives insight into how we feel as an airport community about radar service, the proposed changes and how it impacts us at Reading Regional Airport.

I am the Director of Operations for Reading Regional Airport Authority. After speaking with multiple sources in the community and gathering information, a few concerns come to light regarding the proposed changes.

Like most things, the biggest concerns our tenants have involve time and money. This change will impact operations in and out of RDG. If the change would happen, we are expecting 15 to 30 min delays for release. This will occur due to an added communication line, same direction departures and arrivals, and natural delays due to extra human factors in the system. Not only is this an inconvenience, it will cost the tenant/user money.

If the tenant/user starts their aircraft and needs to wait, extra fuel burn adds up. The time for personnel is done hourly which can add costs. The delays to the destination mean ground personnel at those facilities are also losing productivity. All these issues stack up and multiply with the flight operations we have here.

The numbers: from what I see in the proposal you would save \$194,117 per year over the next 17 years. According to your numbers the RDG Radar services 242 aircraft per day on average and we have about 150 operations per day at the field on average.

Using the lowest operating category in an FAA report from 2013 Form 41. A jet aircraft operating cost on average is \$2,270 per block hour. If we create a conservative estimate using only 20 aircraft delays out of 150 operations at 15 min per aircraft, that is 300 minutes. This calculates to \$11,350 average loss per day by Reading Regional Airport users. Which compounds to over 4.1 Million dollars in a year.

If we look at it from another direction, even one delay per day of 15 minutes outweighs the average savings per year. One jet aircraft delay of 15 minutes per day equals \$555. Over the course of one year this is \$202,575 passed on to the airport users.

Zackary Tempesco

2501 Bernville Rd

Reading, PA 19605

The airport and its local economy: Reading Airport has unique advantages due to a lower cost of living, lower traffic, and its convenience to the Mid-Atlantic Region. We strive to provide the best facility we can, attract new tenants, and provide access for the community.

Reading Airport will lose appeal to pilots, tenants and users if they cannot get out quickly and on time. The potential revenue loss could be added in many ways and is dependent on which tenants we serve in the future. I urge you not to hurt our local economy by making a change for so little return.

A Final word: I understand the FAA needs to save money and find ways to do so, however I do not feel passing this amount on to the users helps the economy, the public or the airport. Please reconsider having RDG as part of this proposal and let us continue to build this community back to a more prosperous area, serving those that live and work in Berks County. Thank you for your time,

Thank you for your time,
Zackary Tempesco
Director of Operations
Reading Regional Airport Authority
610-587-3567

ztempesco@readingairport.org

We have been operating at Reading Airport as a corporate operation since the 1970s. Reading Approach allows us the opportunity to easily depart and arrive in and out of Reading without interruption to our operations. The approach facility is a must as far as being able to (often) get to a lower altitude covered by the local radar to save our company money from not having to execute a published approach (approximately 5-6 minutes). If we land there 5 times a week, that is 30 minutes of operating cost we are saving in only one of our 8 aircraft! In addition, approach has a direct line with the tower, ground, and airport operations during inclement weather and provides a high margin of local knowledge and safety to our company. Aviation has risk. We have tools in place to mitigate the risk. Reading Approach is one of those tools. What the FAA should really focus on is a modern LPV RNP steeper approach to the long prevailing runway 31, but that is another topic. Please consider keeping a Reading Approach in operations.

Kevin Creamer

20 Ridgeway Cr

Birdsboro, PA 19508

To Whom It May Concern:

My company has operated corporate aircraft at the Reading Regional Airport since 1995 and for the last ten years we have operated several multiengine jet aircraft in support of company travel requirements. We choose to keep our aircraft in RDG due to proximity to our corporate headquarters, low cost of operations, and excellent facilities. I oppose the transition of the

Chris Yoder

TRACON to Harrisburg's control for a variety of reasons.

First, it is my understanding that if the TRACON is relocated there is the potential for operators to experience delays of approximately 15-30 min per departure. At an average hourly operating cost of \$2000 per hour my organization could see increased operating costs of more than \$300,000 per year. Keep in mind we are one of many operators that utilize the facility. The total cost to the public could be staggering and the susequent damage to general aviation in the Reading area possibly irreversible.

Secondly, the general consensus among operators that frequent Reading is that safety will be compromised as a result of the TRACON relocation. I certainly agree with my fellow aviators. This past winter is an excellent example. Two of my company's aircraft were returning to Reading during a major snow event. Harrisburg approach was unaware of Reading's active runway or NOTAMs. Of course upon contacting Reading Approach they were quick to update both crews with recent runway conditions that provided the best information whether to divert or land at Reading. My assumption is that there would be a line of communication between the Reading Regional Airport Authority and Harrisburg but I find it unlikely to be as quick or convenient as the Authority contacting the Tower via VHF comm. With the FAAs tremendous focus on runway excursions and overruns it is essential that we have the most accurate and up-to-date information available so we can calculate landing distances that allow us to safely operate our aircraft.

Finally, for many years Reading has served as a brief stop for some of the many controllers who graduate from Oklahoma City. These controllers work at the facility here while they gain "real life" experience. I feel that the steady, but not overwhelming, flow of traffic to the Reading area allows these new controllers to gain valuable work experience in the system and increased confidence. This experience coupled with the low cost of living in our area is nothing but positive for a new controller.

In conclusion, I urge the FAA to retain radar services operating from the Reading Regional Airport. What at first glance what may appear to be an easy decision is anything but easy. Success is not always measured in dollars and cents. Rather, it is measured in what makes sense on a larger scale - the impact to the user community, the local FAA workforce, general aviation, and most importantly the safety of the public.

Thank you in advance for your consideration.

The cost estimates for the Reading Approach Control relocation are outdated and no longer representative of the current situation. During the time period from data collection until the proposal was published in the Federal Register; the pay level at Reading Tower has been adjusted (lowered) due to a decrease in air traffic activity. Since this decrease has already occurred, the savings projected in the cost forecast will not happen.

Allen Fritz

In addition, the FAA installed the latest radar display system into Reading Tower (called STARS ELITE and completed in November 2017) which would significantly impact the calculation for the projected facilities & equipment (technology refreshment) expenses. Harrisburg Approach presently divides their attention between four operating control towers, (FAA Tower at Harrisburg International Airport - MDT, Federal Contract Tower {FCT} at Capitol City - CXY, FCT at Lancaster - LNS, Military contract tower at Muir Army Airfield MUI) looking to add a fifth, the FAA tower at Reading RDG. The FAA proposal contains no projected increase in staffing at MDT.

The FAA will maintain that safety is never compromised, and the controllers are trained to ensure that very fact. However, when the volume and complexity of air traffic rises, controllers will manage that increase by slowing it down and spreading it out. RDG will be one of four towers contacting MDT for release of departing aircraft. (MDT Tower itself has automatic releases from MDT Approach.) Departures can no longer count on being "first in line". MDT Approach does not provide separation services for VFR Practice approaches at LNS and MUI. (CXY is within the Harrisburg Terminal Radar Service Area.) When a consolidation occurs, expect RDG to mirror the standard practice at LNS and MUI. Any air traffic efficiencies claimed can be countered by others that will be lost by removing the approach control function from Reading Tower. After relocation, service to the pilots will not be as efficient, with one controller forced to monitor and provide services in more airspace. Circumstances at Reading Tower have changed the financial picture, negatively affecting the cost savings estimate for the Reading Approach relocation. For these reasons, the relocation of Reading Approach Control to Harrisburg should be halted.

BFL COMMENTS

In the report on page 8:

"Recommendation #2: Realign Bakersfield, CA (BFL) TRACON Operations to Fresno, CA (FAT) TRACON" Under Background it states: "The facility is owned and maintained by the FAA". The facility is actually owned by the City of Fresno, with the City having primary responsibility for its maintenance. The FAA maintains the electronic equipment.

Rollo DeVore

ALO COMMENTS		
The current traffic level at Waterloo doesn't warrant an approach control and Des Moines already has the equipment and capabilities needed to assume the airspace. I support the decision to move the approach control, however, a control tower should remain operational at Waterloo.	Anonymous	
I support the relocation of the Waterloo approach control especially if it results in the control tower being open until 10:00PM Local. As it stands now, the tower is only open for one of the two scheduled passenger flights each day. The second flight arrives around 9:00PM, and the tower closes at 8:00PM.	Anonymous	
If the ALO approach control is moved to DSM, DSM will be too busy to give local ALO pilots practice instrument approaches and provide other training services. While safety will not be compromised, service to the local flying community will suffer.	Robert Cole	
It cost 10 million dollars to put in the new equipment to support ADSB at ALO. It will cost millions more to remove it. Relocating the TRACON will cost a tremendous amount more than leaving equipment where it is. This is not cost effective.	John Public	
When it comes to the security of the National Airspace System, consolidating facilities is a security risk. When Chicago ARTCC was out of operation due to a fire, a large portion of airspace was unusable. Keeping facilities separate decreases the risk of losing functionality due to natural disaster or terrorist attack. If one facility goes down, another can step in.	Dave Gray	
It is my hope that the Waterloo airport staff and radar operation is not changed. In my opinion the chances of growth of our once flourishing airport, would end. This reduction would reduce the chances of Waterloo having greater opportunities of higher employment for our diverse population. Having invested nearly 10 million dollars in next generation radar in 2017 will have been thrown away. I hope you will reconsider this proposal.	Carl Anderson	
ALO TRACON is vital to the local airspace, and facilities at DSM are constantly growing and handling more traffic. Waterloo is growing and well staffed so why take the money to relocate TRACON out of ALO?	Anonymous	
The facility at ALO is used for training new controllers and to prepare them for busier environments at larger hubs. Having TRACON, Tower, and Ground Control located at one facility provides the trainees with a complete and efficient experience that benefits the entire ATC System.	Martin Hoel	
The original study began and was conducted before the \$10 Million STARS Radar System was installed in the ALO Waterloo Tower. Why invest that	Wade Itzen	

amount of money and make the recommended changes for minimal to no monetary benefit over the 17 year period from 2017 - 2034? Cost will actually be more with the proposed # of staffing moving to DSM because of more expensive position grades. ALO provides faster training for controllers and is a training facility for larger facilities. DSM adds 3-6 months of time and cost to their training program. ALO provides more diversity for disasters such as the Chicago fire in 2014 which the FAA asked ALO to work the airspace up to 15,000 ft on a 24 hour watch. Had the radar been in DSM, Chicago ZAU would have had to work the airspace themselves. Recently all phone lines were lost but ALO was able to provide services to users being the radar and frequency feeds come directly to the tower. ALO provides better service to users as there are less restrictive procedures. These things will be lost and add expense if the radar changes are made and it moves to DSM or CID. Please reconsider these changes and NOT recommend it to Congress as it will actually cost the taxpayers MORE money and decrease service. Thank you.

Nick Bird

422 Olympic Dr Waterloo, IA 50701

I am writing this with the hope of receiving clarification as to why Section 804 is moving forward for Waterloo ATCT. When I became the facility Air Traffic Manager for Waterloo in in February 2017, the initial Section 804 information gathering and collaboration meetings had already taken place. Soon after, I began inquiring about the Section 804 findings and how it would affect the facility if implemented. During this time, a plan to install Standard Terminal Automation Replacement System (STARS) equipment was in place as well. I was informed by many people that the Section 804 and STARS programs were running independently and on parallel courses. Whichever program advanced more quickly would be the one to move forward. Seeing as how Section 804 is a budget-driven program, the only way for it to make fiscal sense would be if a full STARS system was not implemented. The initial and future upkeep cost would have been less if a partial STARS system slaved off DSM had been installed. However, the full STARS system was installed in Waterloo and became fully operational in September 2018.

The new staffing number for Waterloo per Section 804 is 7 controllers and 2 supervisors. This is an unrealistic number. I have looked into staffing numbers for other facilities in our district. Comparatively, there are three facilities with similar hours and configurations to what Waterloo would be after Section 804 implementation. Lincoln, Minneapolis Crystal, and St. Paul all have target numbers of 11 controllers and 2 supervisors. The additional airspace that DSM will acquire adds 4 controllers to their staffing numbers. This, I agree is a realistic number. Waterloo's current target number is 13 controllers and 3 supervisors. Using these numbers, Waterloo

will decrease by 2 controllers and 1 supervisor. DSM will increase by 4 controllers. The overall staffing numbers would be increased by 1. The four controllers moving from Waterloo to DSM would most likely be paid for the move. These moves typically cost 27k each, totaling 108k. DSM controllers receive level 7 pay, which is approximately 15k more per year than Waterloo. This would be a 60k per year increase to provide the same service to the flying public. The pay for the additional controller between the facilities is not included in that increase. A new fully certified controller at Waterloo makes around 65k per year. Using the 17-year span, increased salaries and the addition of 1 controller will cost an additional 2.125 million if consolidation moves forward.

I would also like to point out some other numbers and would question where the cost savings are. I have been informed that a full STARS system installation is around 10 million. Also, a slave off of DSM would be around 5 million. Had the Section 804 happened prior to the full STARS system installation at Waterloo, the agency would have saved around 5 million. If Section 804 continues, most of the equipment would either remain here or be removed and Waterloo would slave off DSM. Leaving the equipment negates the cost savings depicted in the consolidation reports. According to the report, not installing the equipment would save 1.6 million in maintenance over a 17 year period. An extra 5 million has already been spent by installing the full STARS system, and more money will need to be spent for the consolidation.

This issue is about maintaining and using infrastructure and jobs. ATC services at Waterloo Regional Airport (ALO) should be maintained for the following reasons.

- 1) The analysis to move ATC positions was completed before a 2017 investment of \$10,000,000 in new equipment by the FAA at ALO.
- 2) Movement of ATC jobs reduces back-up capacity within the region's ATC system. As an example, Waterloo was able to quickly take up responsibilities for some air space during a 2014 fire at Chicago ATC facility.
- 3) Cost savings projected in the outdated analysis are negligible (and probably within the margin of error) at \$95,000 annually over a 17 year period.
- 4) Waterloo can and does serve as a training facility for new ATC. This training at ALO reduces training time at other facilities.
- 5) The Cedar Valley has a lower cost of living.
- 6) Not all federal jobs need to be concentrated in Des Moines or Cedar Rapids.

We live in Waterloo Iowa and use the Waterloo Regional Airport. We would like to have the number of air traffic controllers in Waterloo to stay the same

Waterloo, IA 50703

David Deeds

Lyle Gaines

and the Starz program to stay in place. Our Waterloo City Council is going to help with a letter asking for no changes to our airport. The money for the Starz program has already been spent, it is totally installed and working, with money already spent for training for program. There would be no cost saving at this point since it is already there and being used.

1420 Dearborn Ave

Waterloo, IA 50707

The statistics don't add up to save money, in fact, 4 new air traffic controllers in Des Moines (after cutting Waterloo people) would cost the FAA \$15,000/year more for each of the 4 new people in DM, or \$60,000.

Please leave our Waterloo Regional Airport as it is now, since they already very successfully help other cities when they need help with radar.

Thank you very much for listening to our comment. Lyle and Nanette Gaines

While serving on the Cedar Valley Chamber (Grow Cedar Valley) Air Service Task Force we became aware of the proposed consolidation of radar services from ALO to either Cedar Rapids or Des Moines. From the information provided by local air services staff; a significant upgrade to the radar services here was completed in 2017-18, considering the higher pay grades of air controllers in Des Moines, ALO has served as a training site, the proposed numbers of retained controllers at ALO would be unable to fulfill staff requirements, the use of ALO for a pilot training and the efforts to add air service to ALO for economic growth in this area we would request that including Waterloo in the consolidation recommendation be reconsidered.

David Beaty
2301 W 1st St,

Ste 120

Cedar Falls, IA 50613

We need to keep existing FAA Tower services at the Waterloo Airport vs. proposed changes under consideration. The changes would involve moving several positions from the Waterloo Tower to the Des Moines Tower and operate parts of the Waterloo tower remotely. A study was done and shows some savings over a 17 year period, but those estimations are flawed and do not contain things such as increased costs of the new positions in Des Moines and the decreased services and increased risks of that arrangement. The original study began and was conducted before the \$10 Million STARS Radar System was installed in the ALO Waterloo Tower.

Kristopher Glaser

Why invest that amount of money and make the recommended changes for minimal to no monetary benefit over the 17 year period from 2017 - 2034? Cost will actually be more with the proposed # of staffing moving to DSM because of more expensive position grades. ALO provides faster training for controllers and is a training facility for larger facilities. DSM adds 3-6 months of time and cost to their training program.

ALO provides more diversity for disasters such as the Chicago fire in 2014 which the FAA asked ALO to work the airspace up to 15,000 ft on a 24 hour watch. Had the radar been in DSM, Chicago ZAU would have had to work the airspace themselves. Recently all phone lines were lost but ALO was able to provide services to users being the radar and frequency feeds come directly to the tower. ALO provides better service to users as there are less restrictive procedures. These things will be lost and add expense if the radar changes are made and it moves to DSM or CID.

RESOLUTION NO. 21,505

RESOLUTION OF SUPPORT FOR OPPOSING THE FAA-RECOMMENDED CONSOLIDATION OF THE TRACON (TERMINAL RADAR AND CONTROLO OR RADAR SERVICES, FROM THE FAA-OWNED WATERLOO AIR TRAFFIC CONTROL TOWER TO THE DES MOINES INTERNATIONAL AIPRORT.

WHEREAS, the City Council of the City of Cedar Falls, Iowa, has considered a request for support to oppose the consolidation of TRACON – Radar services as noted above, and to recommended to the FAA Administrator, with a carbon copy to all of Iowa's Congressional delegation, to utilize Waterloo Regional Airport and Waterloo's Air Traffic Control *Tower, as an entry-level and real-world classroom for recent graduates from* the FAA's Air Traffic Control Academy, and WHEREAS, Waterloo Airport staff has been informed that the FAA likes waterloo's ATCT as an excellent training tower, and if that is true, then let the FAA prove such by directing future graduates to be assigned to ALO (Waterloo) so that new controller graduates can obtain Real-World training at our current Classification / Activity Level of Waterloo's ATCT (Level 5), and working in all-weather conditions, whereby they can achieve both In-Cab Controller experience, while also working side-by-side with experienced controllers in ALO's TRACON facility. Then once the graduate achieves both levels of training, they can apply to move to higher activity levels of air traffic facilities, and WHEREAS, Airport staff, as part of a local Aviation Task Force, is proactively requesting support from the City Council of the City of Cedar Falls, Iowa, to support the work of the Task Force in their efforts in blocking and/or opposing the FAA's current recommendation, and to oppose any future consolidation and/or realignment of the radar services from the Waterloo Air Traffic Control Tower to the Des Moines International Airport. NOW THEREFORE, be it resolved by the city council of the City of Cedar Falls, Iowa, that the City of Cedar Falls, Iowa hereby declares its support for opposing the FAA-recommended consolidation of the radar services and opposes any future consolidation and/or realignment of the radar services from the Waterloo Air Traffic Control Tower to the Des Moines International Airport.

Jacque Danielsen

City Council

Local

City of Cedar Falls, IA ADOPTED this 25th day of April, 2019

Signed: James P. Brown, Mayor

Attest: Jacqueline Danielsen, MMC, City Clerk

As CEO and representative of Grow Cedar Valley (lead organization for economic and community development) we strongly oppose the recommended consolidation of the Waterloo, Iowa radar services with Des Moines. FAA recently invested \$10M to upgrade the tower radar equipment making this recommendation hard to justify from a cost saving argument. A viable airport is critical to the economic development of the Cedar Valley region and our businesses fear this is a signature step to removing more and more services that will harm our economy. Please consider seriously our request, along with our congressional representatives, to not include the Waterloo, IA airport in the Section 804 recommendation. Thank you! Cary Darrah, CEO Grow Cedar Valley

Cary Darrah

As the Airport Director for the Waterloo Regional Airport, I cannot tell you all how, unfortunately, short sighted this recommendation is, by Senior FAA officials. The recommendation to Consolidate or Realign Waterloo's TRACON or Radar Services to the Des Moines International Airport assumes, or it is alleged, that there would be a cost savings associated with not installing the upgraded equipment and related hardware for this facility. However, the equipment has ALREADY been installed, and techs have already been trained on the maintenance of this new equipment. ALO is busy, with flight training operations from the very active Dubuque Regional Airport, and the University of Dubuque Flight Training Program, whereby *U-D* students and aircraft frequent Waterloo for cross-country flight training. Yet, they also frequent the airport for "Airmen" practical tests conducted by the General Manager of our FBO. Furthermore, we have frequent Aero-Medical flights for this rural region of Northeast Iowa, for the aero-transportation of patients from rural areas of Northeast Iowa, to both Waterloo and Cedar Falls area hospitals. Additionally, if they need to be transported to higher level of trauma centers, they are then transported by air to the University of Iowa Hospitals and Trauma Center located in Iowa City. It is also my understanding that the Federal Aviation Administration likes the Waterloo ATCT for the training of entry-level controllers. If that is true, then let's continue that partnership. This ATCT facility at Waterloo and the level of traffic would continue to provide an excellent introductory location and environment, and working in an all-weather environment, for new controllers. Once the new controllers get signed off for both Cab and

Radar Training, then at some point, they can apply to transfer to other control towers at higher levels of air traffic facilities. To the FAA, please

give us a chance to continue with the new equipment as already

Keith Kaspari 2790 Livingston Ln

Airport Administration Office Waterloo, IA 50703 installed. Combined with our current ASR, it provides a nice picture of airspace for our NE Iowa region. Therefore, please reverse your decision to Consolidate and/or Realign ALO's TRACON to the Des Moines International Airport.

Sincerely,

Keith Kaspari, C.M., MPA

Airport Director

Waterloo, Iowa, Regional Airport

I am writing you to ask for your support to keep existing FAA Tower services at the Waterloo Airport vs. proposed changes under consideration. The changes would involve moving several positions from the Waterloo Tower to the Des Moines Tower and operate parts of the Waterloo tower remotely. A study was done and shows some savings over a 17 year period, but those estimations are flawed and do not contain things such as increased costs of the new positions in Des Moines and the decreased services and increased risks of that arrangement. The original study began and was conducted before the \$10 Million STARS Radar System was installed in the ALO Waterloo Tower. Why invest that amount of money and make the recommended changes for minimal to no monetary benefit over the 17 year period from 2017 - 2034? Cost will actually be more with the proposed # of staffing moving to DSM because of more expensive position grades. ALO provides faster training for controllers and is a training facility for larger facilities. DSM adds 3-6 months of time and cost to their training program. ALO provides more diversity for disasters such as the Chicago fire in 2014 which the FAA asked ALO to work the airspace up to 15,000 ft on a 24 hour watch. Had the radar been in DSM, Chicago ZAU would have had to work the airspace themselves. Recently all phone lines were lost but ALO was able to provide services to users being the radar and frequency feeds come directly to the tower. ALO provides better service to users as there are less restrictive procedures. These things will be lost and add expense if the radar changes are made and it moves to DSM or CID. Please reconsider these changes and NOT recommend it to Congress as it will actually cost the taxpayers MORE money and decrease service. Thank you.

Lisa Skubal 115 Elm St Washburn, IA 50702

I am writing you to ask for your support to keep existing FAA Tower services at the Waterloo Airport vs. proposed changes under consideration. The changes would involve moving several positions from the Waterloo Tower to the Des Moines Tower and operate parts of the Waterloo tower remotely. A study was done and shows some savings over a 17 year period, but those estimations are flawed and do not contain things such as increased costs of the new positions in Des Moines and the decreased services and increased risks of that arrangement. The original study began and was conducted before the \$10 Million STARS Radar System was installed in the ALO Waterloo Tower.

Carol Lilly
Community
Main Street
310 E. 4th
Street
Cedar Falls, IA
50613
Email:

cmsdirector@c Why invest that amount of money and make the recommended changes for fu.net minimal to no monetary benefit over the 17 year period from 2017 - 2034? Cost will actually be more with the proposed # of staffing moving to DSM because of more expensive position grades. ALO provides faster training for controllers and is a training facility for larger facilities. DSM adds 3-6 months of time and cost to their training program. ALO provides more diversity for disasters such as the Chicago fire in 2014 which the FAA asked ALO to work the airspace up to 15,000 ft on a 24 hour watch. Had the radar been in DSM, Chicago ZAU would have had to work the airspace themselves. Recently all phone lines were lost but ALO was able to provide services to users being the radar and frequency feeds come directly to the tower. ALO provides better service to users as there are less restrictive procedures. These things will be lost and add expense if the radar changes are made and it moves to DSM or CID. Please reconsider these changes and NOT recommend it to Congress as it will actually cost the taxpayers MORE money and decrease service. Thank you. Sincerely. Ms. Carol Lilly Community Main Street 310 E. 4th Street Cedar Falls. IA 50613 Email: cmsdirector@cfu.net Faith Sonksen As a resident of Waterloo my entire life, I can't believe you would even consider taking out our airport. What happens when an airport around here or like the one in Chicago that caught fire needed help to guide the planes in. Waterloo was the one to do it. What about all the updates that have been done out there. What a waste of money to move it to Des Moines. Instead why not help our airport get bigger or better, us residents who use it would love that. The Waterloo Regional is a vital part of the greater Cedar Valley Area in Mark northeast Iowa. This area is an economic hub for the state. The loss of air Hanawalt traffic facilities for this airport would be an economic detriment to the area. 161 Augusta There is still opportunity for increased activity and an additional airport Ln coming into this facility. Please consider leaving the same level of facilities in Waterloo for the current and future growth of the area. Waverly, IA 50677 I strongly support keeping the existing FAA Tower services at the Waterloo Deonna Fritz Airport vs. proposed changes under consideration. The cost savings estimated are based on outdated information and before a significant

investment was made in equipment at ALO. This change will eliminate jobs in our community and hurt air service in our area.	2110 Donald Dr Cedar Falls, IA 50613
I am writing to keep existing FAA Tower services at the Waterloo Airport vs. proposed changes under consideration. The changes would involve moving several positions from the Waterloo Tower to the Des Moines Tower and operate parts of the Waterloo tower remotely. A study was done and shows some savings over a 17 year period, but those estimations are flawed and do not contain things such as increased costs of the new positions in Des Moines and the decreased services and increased risks of that arrangement. The original study began and was conducted before the \$10 Million STARS Radar System was installed in the ALO Waterloo Tower. Why invest that amount of money and make the recommended changes for minimal to no monetary benefit over the 17 year period from 2017 - 2034? Cost will actually be more with the proposed # of staffing moving to DSM because of more expensive position grades. ALO provides faster training for controllers and is a training facility for larger facilities. DSM adds 3-6 months of time and cost to their training program. ALO provides more diversity for disasters such as the Chicago fire in 2014 which the FAA asked ALO to work the airspace up to 15,000 ft on a 24 hour watch. Had the radar been in DSM, Chicago ZAU would have had to work the airspace themselves. Recently all phone lines were lost but ALO was able to provide services to users being the radar and frequency feeds come directly to the tower. ALO provides better service to users as there are less restrictive procedures. These things will be lost and add expense if the radar changes are made and it moves to DSM or CID. Please reconsider these changes and NOT recommend it to Congress as it will actually cost the taxpayers MORE money and decrease service. Thank you.	David Beaty 2302 W 1 st Ste 120 Cedar Falls, IA 50613
Please reexamine the cost savings or not of the transfer of the Tower Services from Waterloo (ALO) to Des Moines. There has been additional equipment already purchased for the Tower that negates a portion of the savings. And there is a huge safety factor on not having sufficient back up for Tower services.	Bob Manning 2908 W 3 rd St Cedar Falls, IA 5061
We want to keep our airport. We fly out of here often.	Michele Heronimus 117 Monroe
	Waterloo, IA 50703

I am commenting specifically on the proposal to close TRACON services in Lyle Krueger the Waterloo, IA control tower and transferring and consolidating services with Des Moines. This plan had great potential to save money had it had been implemented two years ago. However, with the capital investment of (nearly?) ten million dollars in the STARS upgrade in Waterloo already complete, this would appear to negate any cost savings. Throwing away the benefits of the STARS upgrade in Waterloo just makes the FAA look inefficient especially considering the additional millions it would cost to set up all the remote/slave equipment in Des Moines to control Waterloo airspace and make this happen. It makes it look to be a classic example of wasteful government spending. I suggest that it would be more prudent to recoup the investment in Waterloo, keep TRACON services there and reevaluate in five years. The lesser financial issue is the cost of transferring controllers from Waterloo to Des Moines where controllers are paid at a higher level than those in Waterloo. As a private pilot and member of the flying community, I thank you for your consideration. Patricia I applaud a Federal agency that is reducing expenses while being mindful of safety. As a former general aviation pilot, I have used numerous FAA Goddard services across the United States and found the staff to be professional, accurate, and helpful. These services were a radio call away and could be done from anywhere. Currently I am retired and fly south each fall and return each spring via commercial aviation. I find the Waterloo Airport to be expensive and limited in flight options. The area could benefit from a vehicular shuttle service to and from Cedar Rapids and Des Moines. I agree with the FAA report and support their realignments. I am not in favor of the AOL Facilities Realignment to Support Transition to Dennis G. NextGen as part of Section 804 of the FAA Modernization and Reform Act. Bergeson *Therefore- I vote no to the proposed recommendation.* I am writing you to ask for your support to keep existing FAA Tower services Jim Schaefer at the Waterloo Airport vs. proposed changes under consideration. The Waterloo, IA changes would involve moving several positions from the Waterloo Tower to 50701 the Des Moines Tower and operate parts of the Waterloo tower remotely. A study was done and shows some savings over a 17 year period, but those estimations are flawed and do not contain things such as increased costs of the new positions in Des Moines and the decreased services and increased risks of that arrangement. The original study began and was conducted before the \$10 Million STARS Radar System was installed in the ALO Waterloo Tower. Why invest that amount of money and make the recommended changes for minimal to no monetary benefit over the 17 year period from 2017 - 2034? Cost will actually be more with the proposed # of staffing moving to DSM because of more expensive position grades. ALO

provides faster training for controllers and is a training facility for larger facilities. DSM adds 3-6 months of time and cost to their training program. ALO provides more diversity for disasters such as the Chicago fire in 2014 which the FAA asked ALO to work the airspace up to 15,000 ft on a 24 hour watch. Had the radar been in DSM, Chicago ZAU would have had to work the airspace themselves. Recently all phone lines were lost but ALO was able to provide services to users being the radar and frequency feeds come directly to the tower. ALO provides better service to users as there are less restrictive procedures. These things will be lost and add expense if the radar changes are made and it moves to DSM or CID. Please reconsider these changes and NOT recommend it to Congress as it will actually cost the taxpayers MORE money and decrease service. Thank you.

As a 70+ years of residence in Black Hawk Country and Waterloo I must say this consolidation proposal is certainly not in the best interest of the many Iowans living within 100 miles of the Waterloo Airport. Our communities rely on convenient air transportation services and the Cedar Valley region airport is an asset to our lives. The safety and security provided by a fully operated control tower is a necessity.

John Beecher

190 Pershing Rd PO Box 925

Waterloo, IA 50704

As a Waterloo resident who travels frequently for work and pleasure, I feel it is critical to keep the existing Waterloo FAA Tower services at the Waterloo Airport. The changes would involve moving several positions from the Waterloo Tower to the Des Moines Tower and operate parts of the Waterloo tower remotely. A study was done and shows some savings over a 17 year period, but those estimations are flawed and do not contain things such as increased costs of the new positions in Des Moines and the decreased services and increased risks of that arrangement. The original study began and was conducted before the \$10 Million STARS Radar System was installed in the ALO Waterloo Tower.

Leslie Prideaux

2923 Quail Hollow Ln

Cedar Falls, IA 50613

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restrictive procedures. These things will be lost and add expense if the radar changes are made and it moves to DSM or CID. Please reconsider these changes and NOT recommend it to Congress as it will actually cost the taxpayers MORE money and decrease service. Thank you.	
As someone who flies out of Waterloo fairly regularly, as do a number of my colleagues at the University of Northern Iowa, I am not in favor of relocating the Tower Services to Des Moines. I believe it will reduce the level of service and consequently serve as a triggering event that will eventually lead to the closing of the airport. In my estimation, that would be extremely detrimental to the economic vitality of the Cedar Valley.	Dan Breitbach
I am writing you to ask for your support to keep existing FAA Tower services at the Waterloo Airport vs. proposed changes under consideration. The changes would involve moving several positions from the Waterloo Tower to the Des Moines Tower and operate parts of the Waterloo tower remotely. A study was done and shows some savings over a 17 year period, but those estimations are flawed and do not contain things such as increased costs of the new positions in Des Moines and the decreased services and increased risks of that arrangement. The original study began and was conducted before the \$10 Million STARS Radar System was installed in the ALO Waterloo Tower.	Jaymi Shores
Why invest that amount of money and make the recommended changes for minimal to no monetary benefit over the 17 year period from 2017 - 2034? Cost will actually be more with the proposed # of staffing moving to DSM because of more expensive position grades. ALO provides faster training for controllers and is a training facility for larger facilities. DSM adds 3-6 months of time and cost to their training program.	
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I am hoping that common sense and dollars prevail. Although, I have not been intimately involved in the situation, from what I have read, Waterloo Airport has complied with the updating the tower, but for some reason, the FAA is not recognizing that. I work for a state university in Cedar Falls and	Elaine Johnson 1616 Partridge Ln

always try to fly out of Waterloo to support the airport. I fly through Chicago on American and the flights are always full both to and from Chicago. I see people from the university and local businessmen that I recognize who also take the flight. In my opinion, it would be a hindrance to the "saleability" of the university and incoming companies, if there was not a local airport. Also, think of the dollars that turn over from the airport - it would also be a revenue negative situation for the Cedar Valley.	Waterloo, IA 50701
I have many concerns in regards to the proposed realignment and oppose moving things to Des Moines. As a resident of Black Hawk County that uses our local airport, I feel its in our best interest and safety to keep our tower operational.	Luann Gerber
It sounds as if this decision is being made on out of date information. \$10million in additional investment already having occurred. Higher cost for tower operators? Not sure why this is the best for the tax payers or residents of the community?	Bari Richter
I am writing in opposition of the proposed Waterloo Airport Tower FAA changes to move certain positions to the Des Moines Airport Tower. The Government recently spent \$10 Million for the upgraded radar equipment and it would be money wasted to make these proposed changes. To operate the tower from Des Moines remotely would also present a perceptional and real safety issue also. Projected savings are "phantom" in reality and projected over a 17 year period, again, very theoretical. Please reconsider this proposed change as the existing service is excellent and we want to keep it that way. Thank you.	Stephanie Itzen
Please do not move TRACON services from ALO to DSM, as proposed under Section 804. STARS equipment, at a cost of \$10,000,000 has already been installed @ ALO, so the cost savings cited in the proposal are not correct. Any savings realized by moving controllers from ALO will likely be spent to increase the number of controllers @ DSM. In addition, ALO serves as a good place for training new Air Traffic Controllers, as well as an available backup in case of another incident similar to the 2014 fire @ the Chicago Center.	Sheila Combs 4744 W Mount Vernon Rd Cedar Falls, IA 50613
I have many concerns about moving things to Des Moines. As a Waterloo native, I have many family members that use the Waterloo Airport to come back home and I pick them up, and I would hate to have to drive to Des Moines, over 2 hours away to do this. I feel its in our best interest to keep Waterloo's tower open.	Janelle Rench
I have the following concerns about reducing services at the Waterloo (ALO) traffic control tower as follows: 1) Reducing said services only saves \$95,000 a year	Brent Buhr

2) Having staffing at the tower is important in times of security issues, 922 Mulberry especially regarding any events at OHare St 3) There has been a \$10 million dollar investment in equipment upgrade at Waterloo, IA Waterloo tower, which should be utilized 50703 4) This is another step in the disinvestment from rural communities which further weakens these areas in terms of economic development viability. Waterloo has 3 runways and a desirable location that could be used for freight air development. Without personnel and infrastructure, expanding economic opportunities for such smaller cities becomes more difficult and eventually impossible. This simply accelerated the urban/rural divide. Please maintain current staffing and services at Waterloo tower. Do not realign the waterloo air control tower. Julie Riegel Waterloos Airport is essential to its economic growth and development, we Theodore need our Airport to support new businesses and growing businesses with our Batemon population income and other demographic factors there is no reason to think 913 Homepark we cannot increase airport usage and the need to keep the current level of Blvd Air Traffic controllers. Thank you Ted Batemon Lois Ln Waterloo, IA 50702 I am writing today to request that you make your best efforts to maintain the Carole Deeds current Waterloo Airport tower and radar services. Recently it was 1802 Orchard announced that the Federal Aviation Administration (FAA) planned to move Dr some staff and related services from the Waterloo Airport tower to Des Moines. As has been explained, the study that justified such a change was Cedar Falls, IA prepared prior to a recently completed \$10 million upgrade of equipment at 50613 the tower. It seems unfortunate that such an upgrade was completed and now, based on an outdated study, the Cedar Valley and the Waterloo Airport won't realize the full benefit of that investment. The proposed change will also have the effect of moving quality jobs out of the Cedar Valley. Not concentrating government jobs into just a few locations (Des Moines in this case) limits the positive impact that these jobs can have on other parts of Iowa. Additionally, the Cedar Valley provides a benefit to these employees by providing a low-cost of living, high-quality place to call home. Finally, the outdated study projects cost savings of less than \$95,000 per year over a 17-year period. This seems like marginal, and probably unreliable, savings given the 17-year projection time frame and a small return on reduced service to the Waterloo Airport users.

Finally, I urge you to express to the FAA your desire to see the current radar services and staffing maintained at the Waterloo Regional Airport for the benefit of the entire Cedar Valley and northeast Iowa.	
I have many concerns in regards to the proposed realignment and oppose moving things to Des Moines. As a resident of Black Hawk County that uses our local airport, I feel its in our best interest and safety to keep our tower operational.	Vince Lumetta
As a citizen of Black Hawk county, and a frequent user of the Waterloo Airport for general aviation purposes, I do not support the proposed move of the Waterloo Approach controllers to DSM. My primary concerns are the loss of efficiency, and thus more hassle for pilots and controllers alike, and the fact that information would have to go from Waterloo's radar all the way to DSM. This is a weak link, and would be subject to failure, potentially when we need it most. Besides this, because Waterloo already has the STARS system installed, there seems to be no monetary benefit to moving. I would strongly advise this proposal to move approach control be abandoned.	Anonymous
Dear Sir, I believe your cost benefit analysis is inaccurate regarding the relocation of ALO TRACON operations as the savings from not incurring the costs associated with refreshing ALOs automation system are overstated as those costs have already been incurred and are therefore a sunk cost and the \$1.6 million savings from 2017-2034 is significantly overstated as approximately \$10 million has already been spent refreshing the automation system and therefore should be backed out of the cost savings estimate which would then reflect a benefit of approximately \$8.4 in retaining the TRACON operations at ALO. Thank you. Sincerely, Dennis M. Hansen	Dennis Hansen
As a pilot whom regularly operates out of the Waterloo (KALO) regional airport I would like to express my opposition to the Consolidation or Realignment of Waterloos Air Traffic Control Tower TRACON or Radar Services to the Des Moines International Airport Traffic Control Tower. Having a locally based approach control service working side by side with the tower is of great benefit to our crew and passengers. It enhances safety, accurate communication, and decreases delays that are often incurred when having move than one aircraft operating under IFR in the same airspace.	Tom Haas
As is seen in numerous other comments, the proposed cost savings are based on flawed and outdated data. It is certainly beneficial for the Waterloo airport to continue to have approach services maintained on site, and it appears if the correct data and financials are used it is also a cost benefit to the FAA and the taxpayers to allow tracon services to remain in Waterloo.	Tim Newton

As a very frequent user of these services, I certainly support keeping the positions in Waterloo.	
I support keeping the air traffic control tower in WATERLOO.	Heather Brady 10162 S
	Hudson, IA
	50643-2099
I support keeping the air traffic control tower in WATERLOO.	Nicole Fischels
I'm writing this on behalf of my wife and me. A big reason my family and I moved to Waterloo in May 2017 was because there's an airport. I use the Waterloo airport weekly to fly through Chicago for work. In fact, the TSA staff at ALO refers to me as "guitar man" because I travel to join cruise ships weekly as a headlining act and I always have a guitar on my back.:) My wife works in local media and only took the job interview in this area because when she asked the employer, "Is there an airport?," they could happily reply, "Yes, there is!" Additionally, because I am traveling so often in and out of ALO, my wife's parents fly in and out of ALO regularly from Massachusetts to help take care of our toddler daughter while my wife is at work. I say all of this to drive home the point that this airport is a vital part of our family's crazy schedule and lives. But moreso, we are not alone. There are many families like us. People are willing to pay the extra cost of a ALO ticket because of convenience.	Travis Turpin
Personal, selfish reasons aside, this airport is vital to maintain our community's growth and to keep our big businesses that have made their home here want to stay. That's John Deere, Target, the University of Northern Iowa, this list goes on, and I'm sure the FAA knows this. An eventual closure of ALO would be detrimental to this area. We realize realigning the control tower operations is almost certainly the first step in closing the airport altogether in time, and we hope our voices here in the Cedar Valley are not lost on this very important matter.	
It's a small airport, yes, but it plays a large part in many lives around here. Thank you for your time and consideration.	
I am opposed to the Re-Alignment of the Waterloo Airport's Air Traffic Control Tower to the DesMoines Airport.	Casey McLaughlin
I am opposed to the Re-Alignment of the Waterloo Airport's Air Traffic Control Tower to the DesMoines Airport.	Brent Beaty

I believe this proposal is being made using outdated data. The original study began and was conducted before the \$10 Million STARS Radar System was installed in the ALO Waterloo Tower. Trying to operate this airport remotely is a bad idea. Recently all phone lines were lost but ALO was able to provide services to users because the radar and frequency feeds come directly to the tower. ALO provides better service to users as there are less restrictive procedures. These things will be lost and create an added expense if the radar changes are made and it moves to DSM or CID, and, if phone lines go down again, which is entirely possible, the ability to provide services to this area will be completely lost for the period of the outage. Please reconsider these changes and do not recommend it to Congress, as it will actually cost the taxpayers MORE money and decrease service. Thank you.	Paul Wallace 1702 Quail Ridge Rd Cedar Falls, IA 50613
I am opposed to the Re-Alignment of the Waterloo Airport's Air Traffic Control Tower to the Des Moines Airport.	Melissa Beaty
The FAA has a considerable investment in the Waterloo Regional Airport control tower. We appreciate this investment and its economic impact on the region. Losing local control of the tower could lead to reducing other operations at the Waterloo Airport, which will negatively impact economic development and the future of the University of Northern Iowa.	Randy Pilkington 5031 Mercedes Bend Waterloo, IA 50701
The proposed facilities realignment of the Waterloo, IA. airport needs to be seriously considered and I as a interested citizen of the community ask you to not move positions, equipment and services to Des Moines.	Ann Barry
Waterloo/Cedar Falls is a vibrant community working hard to grow the economy. Equipment improvements made enhance the importance of keeping the personnel and services here for the sake of our local and regional needs. To say that savings would be better moving all to Des Moines does not serve the needs of this area and in essence is not a cost savings but would impact immediately a loss to the FAA.	
I am confident that upon deeper review that you will see the value of keeping the Waterloo Airport growing by NOT doing the proposal of realignment because it's not a good transition impacting negatively everyone involved.	
I want to request that you withdraw the recommendation to consolidate radar services from Waterloo Airport to Des Moines. The loss of jobs here in the Cedar Valley is only one factor for my request, but a very important one.	Katheryn Duke 3804 Pheasant Dr
	Cedar Falls, IA 50613

The Next Generation Air Transportation System (NextGen) is the Federal Aviation Administration's modernization of America's air transportation system to make flying safer, more efficient, and more predictable. The promise of NextGen is to increase safety and efficiency amidst the everincreasing demand for air traffic services. NextGen provides the Federal Aviation Administration (FAA) capabilities and flexibility to adjust to a changing aviation environment. It replaces a system designed for an air transportation system that existed in the 1950s and 1960s.

David Dohlman

Congress passed and President Obama signed the FAA Modernization and Reform Act of 2012, requiring the Federal Aviation Administration to identify opportunities for reducing operating costs through realigning and consolidating air traffic control functions.

Waterloo Regional Airport has struggled for years to maintain commercial air service. American Airlines is the only remaining carrier to serve the airport with two daily flights to Chicagos OHare Airport. Better and more efficient air traffic services, reduced aircraft operating costs and greater reliability are key elements to keeping American Airlines presence at the airport profitable.

The Waterloo Airport Traffic Control Tower (ATCT) operates between 6:00am and 10:30pm daily. Outside of those hours, the Terminal Radar Approach Control (TRACON) ceases to exist. Air traffic control services are provided by the Chicago Air Route Traffic Control Center in Aurora, Illinois utilizing a long-range Air Route Surveillance Radar (ARSR) site located at Arlington, Iowa. The ARSR is not designed to provide radar approach control functions and its limitations significantly reduce the flow of air traffic in and out of the Waterloo airport. Aircraft arriving after 10:30pm can expect arrival delay, which increases operating cost and reduces profitability.

For decades, the Waterloo TRACON provided radar approach control service utilizing an Airport Surveillance Radar (ASR-7) and Automated Radar Terminal System (ARTS) operating system. This pairing required the TRACON to be co-located with the radar site. Over time, the ARTS operating system became increasingly antiquated and incompatible with neighboring air traffic control facilities. Its inefficiency was inconsistent with NextGen goals.

The upgrade of Waterloos radar to a digital ASR-11 and replacement of ARTS with the Standard Terminal Automation Replacement System (STARS) permits greater flexibility, enabling the digitized radar data to be displayed at any location. The FAA investment in STARS at Waterloo facilitates the

realignment of TRACON operations to Des Moines.

The Des Moines TRACON operates continuously, 24 hours daily. Its personnel are generally more experienced and have a commensurate skill level than those typically assigned to the Waterloo TRACON. Des Moines TRACON has the capability to provide continuous approach control service to aircraft arriving and departing Waterloo Regional Airport utilizing the ASR-11 and STARS platform. Des Moines TRACON can provide surveillance to the surface, reduced separation intervals, and greater efficiencies than that provided by the Chicago Air Route Traffic Control Center. This NextGen capability improves aviation safety and reduces operating cost.

Assertions that losing the radar approach control function ultimately leads to losing the air traffic control tower are wrong and demonstrate ignorance of FAA operations. Such false prophecies spread misinformation and fear, hoping to rally opposition to change. Following several realignments across the nation, no air traffic control tower has been closed or privatized because of Section 804 of the Act. Nor is there any plan to do so.

For those who truly understand community development and aviation economics, transferring Waterloo TRACONs operations to Des Moines benefits the entire Cedar Valley area. It strengthens aviation in the area by providing a better service to area aviators. It helps preserve commercial aviation at the Waterloo Regional Airport by making operations more economical for the provider. Rational decision makers will see past the emotional fear mongering and realize all that is to be gained for the community. The promise of NextGen is realized.

I believe the goals of Section 804 are well-intentioned, however, the proposal to realign the ALO TRACON to DSM will actually cost more money than it will save while reducing the quality and efficiency of the services provided to the public.

A large percentage of the traffic for ALO is instrument pilot training. It is not uncommon for three aircraft to be cleared for instrument approaches to different runways at the same time. In addition, ALO only has one ILS approach (which happens to be situated in the opposite direction of the prevailing winds) which creates many opposite direction operations. These opposite direction operations need to be carefully coordinated between the local controller and the approach controller to balance the needs of the training aircraft requesting the opposite direction operation and the other aircraft using the active runway. ALO is able to efficiently accommodate these opposite direction operations and the itinerant aircraft on approaches

John Holliday

to multiple runways because often the local controller and approach controller are right next to each other in the tower cab. The approach controller can see what active and potential traffic the local controller has and can anticipate an efficient solution for aircraft spacing. If the approach control position is moved to another facility, we would lose that ability and as a result, lose opportunities to accommodate requests for pilot training.

One of the purposes of the Section 804 Statute is to reduces costs to the FAA. The FAAs proposal indicates cost-savings by realigning ALO TRACON to DSM, however, the data that the FAA used in its cost summary is inaccurate. The FAA has proposed that after realignment, ALO Tower would have a target staffing number of 7 controllers. This would leave ALO impossibly understaffed. Other level 4 towers in the region with similar operating hours (LNK, MIC, STP) have target staffing numbers of 11 controllers. To account for this adjustment the FAA needs to factor in four more controllers making level 4 pay into their cost summary. With an average pay of \$70,000, four level 4 controllers over 17 years would cost the FAA an additional \$4.8 million, not including the cost of benefits to those controllers. Using the FAAs own figures in the Section 804 proposal, the agency anticipates roughly \$1.6 million in savings over 17 years to relocate the ALO TRACON to DSM. The actual net result is that by realigning the ALO TRACON to DSM, the FAA will waste more than \$3.2 million that it could have saved by keeping the TRACON in ALO.

I can understand the FAA wanting to reduce spending, where possible. I can even understand the FAA wanting to reduce spending even at the expense of lost efficiencies and quality of service. However, it makes no sense to me that the FAA is proposing to reduce the quality of service and increase spending at the same time. The FAA should keep the ALO TRACON in ALO or, at a minimum, place the realignment on hold while more accurate numbers are used to recalculate the cost savings analysis.

I am opposed to the relocation of TRACON services from Waterloo to Des Moines for the following reasons: The projected cost savings is not viable. The pay rate for Des Moines staff is higher than Waterloo. The remote services will rely upon uplinked data from Waterloo. The service will only work when the connection does. The stated headcount for Waterloo is not in alignment with that of other Class D airports who have had a TRACON relocation. The estimate exaggerates the savings. Waterloo is a training facility. It is valuable for these new staffers to be cross trained in both tower and TRACON functions. Waterloo personnel are familiar with Waterloo landmarks. It will mean nothing to Des Moines personnel to say "near Buckingham, inbound". In short, I think the savings for the relocation

Todd Loes

proposal doesn't exist. And there's an infrastructure expense to make this happen. Thank you for your consideration.	
We are opposed to the proposal to relocate TRACON air traffic control to another airport. We need to keep all our employees in Waterloo. Thank you. Marlyn and Marcia Allspach 303 3rd Ave Parkersburg, Iowa 50665 319-346-2200 allspachmarmar@aol.com	Marlyn Allspach
BGM/ELM COMMENTS	
To the Committee Evaluators, It is my understanding that the FAAs Air Traffic Controls Section 804 Consolidation Report calls for the consolidation of both New York States BGM and ELMs TRACON facilities to the facility of AVP located in Pennsylvania. As Broome County Executive, I strongly oppose this recommendation based on several factors including employee efficiencies, cost savings, and loss of jobs and payroll.	Jason Garnar 60 Hawley St. Binghamton, NY 13902
First and foremost, the notion of the loss of good paying jobs in New York to a neighboring state is unacceptable. From the information we've gathered, both staffs would be roughly reduced by half, meaning that up to 20 jobs would be lost in New York. This could result in over \$1 million being lost in payroll each year for Upstate New York. Furthermore, with the loss of positions, the BGM facility has the potential to be downgraded in the ATC level from a level 5 to level 4 after just a year or two. This would result in a further reduction of payroll and desirability of the position. BGM is also a training facility that would be greatly reduced should the TRACON services be moved to another facility.	
The 804 Consolidation report discusses cost savings as a major factor in the decision to consolidate BGM to AVP. With some research we have found the financial information used is inherently flawed. The report shows a cost savings ratio of 1.1. However, the report was studied in 2016 prior to the installation of the STARS (Standard Terminal Automation Replacement System) at BGM and ELM. The report cites that by not installing these systems at our facilities, money will be saved. Wed like to bring to light that the system installation of the STARS was completed in April 2018 at BGM. Thus, rendering the cost saving point moot. In fact, we feel that by consolidating BGM to AVP it would be a gross mismanagement of funding to have installed this system only to then either remove it (costing additional funds) or abandon it. Additionally, moving controller positions from BGM to	

AVP will result in an increase of pay as BGM is a level 5 facility and AVP is a level 6 facility. However, if ELM is consolidated into BGM, no additional pay increase is required as the overall level will remain the same.

Finally, the report describes efficiencies that can be realized by the consolidation to AVP such as the required coordination, handoffs, and the increase of service altitudes. BGM currently has the capabilities to provide this coverage. However, they do not have the staffing to complete this around the clock. If ELM were consolidated to BGM, there would be enough staff to provide all the coverage needed up to 10,000 MSL as discussed in the 804 Consolidation report. Furthermore, this would result in jobs being retained in New York State and those with institutional knowledge of the area providing excellent radar coverage. BGM underwent a terminal renovation, which included the Air Traffic Control facilities, in 2007 and this was not considered, or at least not discussed in the report. It is the desire of BGM to conduct another renovation and therefore continue to modernize our facilities at no additional costs to the tenants.

I ask that you reconsider your consolidation of the TRACONs of BGM and ELM into AVPs facility. It is our desire that you keep the jobs in New York, keep the facilities intact, and review your financial data based on current factors. We understand that the goal of the 804 Consolidation report is to find cost savings for the Federal Government. If required, I feel that ELM can consolidate to BGM with adequate savings while also keeping jobs in New York. We disagree with the recommendation that BGMs TRACON should be consolidated to Pennsylvania's AVP station and ask for this recommendation to be thrown out.

Thank you for your time and consideration in this very serious matter. Jason T. Garnar Broome County Executive

The Greater Binghamton Airport Administration would like to voice their opposition to the recommendations in the Section 804 Report to consolidation BGM to AVP. We feel that the information used to obtain the "cost savings" is flawed and no longer relevant for the purposes of this report. Furthermore, we are strongly opposed to the loss of jobs in New York to a neighboring state facility. We find this suggestion to be a gross misuse of personnel and funding.

Please review the attached letter for additional details. (Below)

Mark Heefner 2534 Airport Rd #16 Johnson City, NY 13790 Broome County Department of Aviation

Jason T. Garnar, County Executive • David W. Hickling, Commissioner

To the Committee Evaluators,

The Administration of the Greater Binghamton Airport, Broome County Department of Aviation would like to voice our opposition to the recommendations for consolidation found in the FAA's Air Traffic Control's Section 804 Consolidation Report. The report calls for the consolidation of both New York State's BGM and ELM's TRACON facilities to the facility of AVP located in Pennsylvania. We would like to voice our overwhelming opposition to this recommendation based on the shortfalls of the report in the areas of employee efficiencies, cost savings, and loss of jobs and payroll that this would result in. To begin, the report describes efficiencies that can be realized by the consolidation to AVP such as the required coordination, handoffs, and the increase of service altitudes. BGM currently has the capabilities provide this coverage. However, they do not have the staffing to complete this around the clock. If ELM were consolidated to BGM there would be more than enough staff to provide all the coverage needed up to 10,000 MSL as discussed in the 804 Consolidation report. This would result in jobs being retained in New York State and those with institutional knowledge of the area providing excellent radar coverage. The facility would also be able to stay at level 5 while realizing these efficiencies. BGM underwent a terminal renovation, which included the Air Traffic Control facilities, in 2007 and this was not considered, or at least not discussed in the report. We are planning to conduct another renovation and therefore continue to modernize our facilities at no additional costs to the tenants. We feel that this should have some consideration within the report as well. Secondly, cost savings as a major factor in the decision to consolidate BGM to AVP as discussed in the 804 Consolidation report. However, we have found the financial information used is inherently flawed. The report shows a cost savings ratio of 1.1. However, the report was studied in 2016 prior to the installation of the STARS (Standard Terminal Automation Replacement System) at BGM and ELM. The report cites that by not doing the installation of these systems at our facilities, money will be saved. We'd like to bring to light that the system installations of the STARS have been completed in April 2018 at BGM. Thus, rendering the cost saving point moot. In fact, we feel that by consolidating BGM to AVP it would be a gross mismanagement of funding to have installed this system only to then either remove it (costing additional funds) or abandon it. Additionally, by moving controller positions from BGM to AVP it will result in an increase of pay as BGM is a level 5 facility and AVP is a level 6 facility. However, if ELM is consolidated into

BGM, no additional pay increase is required as the overall level will remain the same. BGM's facility has been renovated in 2007 and there has not been additional rent increases thus BGM's operating costs for ATC as a tenant is near the industry floor in terms of cost. BGM also has additional room to accommodate an increase in staffing and equipment whenever the ATC should deem necessary. Finally, the loss of good paying jobs in New York to a neighboring state is absolutely unacceptable. From the information we've gathered, both staffs would be roughly reduced by half, meaning that up to 20 jobs would be lost in New York. This could result in over \$1 million being lost in payroll each year for Upstate New York. Furthermore, with the loss of positions, the BGM facility has the potential to be downgraded in the ATC level from a level 5 to level 4 after just a year or two. This would result in a further reduction of payroll and desirability of the position. BGM is also a training facility that would be greatly reduced should the TRACON services be moved to another facility. We ask that you reverse your consolidation of the TRACON's of BGM and ELM into AVP's facility. Please consider keeping the jobs in New York, keeping the facilities intact, and reviewing your financial data based on current factors. We understand that the goal of the 804 Consolidation report is to find cost savings for the Federal Government. If required, we feel that ELM can consolidate to BGM with adequate savings while also keeping jobs in New York. We disagree with the recommendation that BGM's TRACON should be consolidated to Pennsylvania's AVP station and ask for this recommendation to be thrown out. We would happily answer any questions or provide comments on any of the information we discussed in this letter. Please reach out to us at any time with questions. We appreciate your detailed review of the items we've discussed in this letter.

Thank you,
David Hickling, Commissioner of Aviation
Mark Heefner, Deputy Commissioner of Aviation

Dear Committee Evaluators:

I've recently been advised that the FAA's Air Traffic Control's Section 804 Consolidation Report calls for the consolidation of both New York State's BGM and ELM's TRACON facilities to the facility of AVP located in Pennsylvania. As the State Senator representing the community surrounding Edwin A. Link Field, I strongly oppose this move based on several common sense factors including employee efficiencies, cost savings, and loss of jobs and payroll.

Robin Alpaugh

New York State Senate First and foremost, the notion of the loss of good paying jobs in the Southern Tier of New York to a neighboring state is unacceptable. As I understand, both staffs would be roughly reduced by half, meaning that up to 20 jobs would be lost in New York. This could result in over \$1 million being lost in payroll each year for Upstate New York. Furthermore, with the loss of positions, the BGM facility has the potential to be downgraded in the ATC level from a level 5 to level 4 after just a year or two. This would result in a further reduction of payroll and desirability of the position. BGM is also a training facility that would be greatly reduced should the TRACON services be moved to another facility.

The 804 Consolidation report discusses cost savings as a major factor in the decision to consolidate BGM to AVP. With some research I have found the financial information used is inherently flawed. The report shows a cost savings ratio of 1.1. However, the report was studied in 2016 prior to the installation of the STARS (Standard Terminal Automation Replacement System) at BGM and ELM. The report cites that by not doing the installation of these systems at our facilities, money will be saved. I'd like to bring to light that the system installations of the STARS was completed in April 2018 at BGM. Thus, rendering the cost saving point moot. In fact, we feel that by consolidating BGM to AVP it would be a gross mismanagement of funding to have installed this system only to then either remove it (costing additional funds) or abandon it.

Additionally, moving controller positions from BGM to AVP will result in an increase of pay as BGM is a level 5 facility and AVP is a level 6 facility. However, if ELM is consolidated into BGM, no additional pay increase is required as the overall level will remain the same.

Finally, the report describes efficiencies that can be realized by the consolidation to AVP such as the required coordination, handoffs, and the increase of service altitudes. BGM currently has the capability to provide this coverage. However, they don't have the staffing to complete this around the clock. If ELM were consolidated to BGM, there would be enough staff to provide all the coverage needed up to 10,000 MSL as discussed in the consolidation report. Furthermore, this would result in jobs being retained in New York State and those with institutional knowledge of the area providing excellent radar coverage. BGM underwent significant terminal renovation, which included the Air Traffic Control facilities, in 2007 and this was not considered, or at least not discussed in the report. It is the desire of BGM to conduct another renovation and therefore continue to modernize our facilities at no additional costs to the tenants.

I strongly suggest that you reconsider your consolidation of the TRACON's of BGM and ELM into AVP's facility. It's my goal to keep the jobs in New York, as well as keep the facilities intact, and ask that you revisit your financial data based on current factors. I understand that the goal of the 804 Consolidation report is to find cost savings for the Federal Government, and perhaps ELM can consolidate to BGM with adequate savings while keeping jobs in New York. I stand against the recommendation that BGM's TRACON should be consolidated to Pennsylvania's AVP station and ask that this recommendation be thrown out.

Thank you for your time and consideration in this very serious matter.

Sincerely,

Frederick J. Akshar II

New York State Senator

Dear Administrator Elwell,

We write regarding the Federal Aviation Administration (FAA)'s Section 804 Working Group's "National Facilities Realignment and Consolidation Report." We are concerned about recommendation #4, to realign Binghamton, NY (BGM) TRACON operations and Elmira, NY (ELM) TRACON operations to Wilkes-Barre/Scranton, PA (AVP) TRACON, and request that you work with our offices to ensure that job losses in New York are mitigated.

BGM and ELM have invested in facility modernization in order to best serve the Southern Tier, including a 2007 facility renovation at BGM and the recent installation of the latest Standard Terminal Automation system at both airports. As representatives of the Southern Tier, we are concerned about the potential impact that facility realignment could have on the local economy, air traffic efficiency and specifically with the loss of jobs in the Southern Tier. The FAA air traffic controllers and technicians, slated to be relocated as a result of this realignment, make competitive salaries and contribute to the economy in both communities. As the FAA moves forward with Section 804 compliance, we need to ensure that operations at BGM and ELM are not impacted and that every due consideration is made to mitigate job losses and to achieve maximum safety and efficiency.

We understand that the goal of the Section 804 report is to find cost savings. We support this goal but want to work with your office to ensure minimal Robert Dougherty

impact for the Southern Tier, maintain maximum efficiency and safety, and urge consideration of alternate options that retain New York jobs and achieve all these objectives. Thank you for your time and consideration and we look forward to your response.

Sincerely,

Charles Schumer – U.S. Senator

Anthony Brindisi – Member of Congress

Committee Evaluators,

I am writing to express my opposition to the potential consolidation of New York's BGM and ELM TRACON facilities to AVP in Pennsylvania. This proposal would have a tremendous negative effect on our local airports, travelers, and most importantly the employees working at these facilities.

The consolidation of these two TRACON facilities will reduce staff at BGM and ELM by half, resulting in the loss of 20 jobs here in the Southern Tier. That equates to the loss of more than \$1 million per year in payroll. With the loss of these positions, BGM has the potential to be downgraded from an ATC level five to a level four in just a few years; this would result in additional loss in payroll and the desirability of these jobs. The Greater Binghamton Airport is also a training facility that would be significantly reduced should TRACON services be consolidated to Pennsylvania.

The FAA's Air Traffic Control's Section 804 Consolidation Report also cites cost-savings as a benefit of this proposal. However, the financial information this estimate was based on is outdated and inaccurate. The research from the final report was conducted in 2016, prior to the installation of the Standard Terminal Automation Replacement System (STARS) at both BGM and ELM and indicates that money will be saved by not implementing this system. STARS was completed at BGM in April of 2018, rendering this projected cost-savings irrelevant. Moreover, consolidation could result in a greater mismanagement of funding as the system would have been installed only to remove it or abandon it.

Increased efficiency is another projected benefit of the consolidation proposal, but one that can be achieved without moving these positions out of New York. BGM currently has the capability to provide the coverage that would achieve this goal but does not currently have staffing to complete it around the clock. If ELM were to be consolidated to BGM, there would be

Donna Lupardo

44 Hawley St.

17th Floor

Binghamton, NY 13901

enough staff to provide all the coverage needed up to 10,000 MSL as discussed in the 804 Consolidation report. Most importantly, this can be achieved while retaining good paying jobs.

It is important to note that BGM underwent a terminal renovation, which included the Air Traffic Control facilities, in 2007. These improvements were not mentioned in the report. BGM is interested in undertaking another renovation with the intention of continuing its modernization efforts at no additional cost to tenants.

While the goal of the 804 Consolidation report is to find cost savings for the Federal Government, this proposal does not seem to effectively achieve it. I strongly urge you to reconsider this proposal, and in doing so reevaluate financial data based on current factors. If any consolidation is needed, that of ELM to BGM would be a natural fit that retains jobs in New York State while also improving efficiency. However, this should be a last resort and I respectfully ask that the current proposal be withdrawn.

Thank you for your time and consideration in this very serious matter.

Sincerely,

Donna A. Lupardo

Member of Assembly

Co-Chair, NYS Legislative Aviation Caucus

To the Committee Evaluators.

It is my understanding that the FAA's Air Traffic Control's Section 804 Consolidation Report calls for the consolidation of both New York State's BGM and ELM's TRACON facilities to the facility of AVP located in Pennsylvania. We strongly oppose this recommendation based on several factors including employee efficiencies, cost savings, and loss of jobs and payroll.

First and foremost, the notion of the loss of good paying jobs in New York to a neighboring state is unacceptable. From the information we've gathered, both staffs would be roughly reduced by half, meaning that up to 20 jobs would be lost in New York. This could result in over \$1 million being lost in payroll each year for Upstate New York. Furthermore, with the loss of

Terry Hebbard

4687 State Hwy 41

Greene, NY 13778

positions, the BGM facility has the potential to be downgraded in the ATC level from a level 5 to level 4 after just a year or two. This would result in a further reduction of payroll and desirability of the position. BGM is also a training facility that would be greatly reduced should the TRACON services be moved to another facility.

The 804 Consolidation report discusses cost savings as a major factor in the decision to consolidate BGM to AVP. With some research we have found the financial information used is inherently flawed. The report shows a cost savings ratio of 1.1. However, the report was studied in 2016 prior to the installation of the STARS (Standard Terminal Automation Replacement System) at BGM and ELM. The report cites that by not doing the installation of these systems at our facilities, money will be saved. We'd like to bring to light that the system installations of the STARS was been completed in April 2018 at BGM. Thus, rendering the cost saving point moot. In fact, we feel that by consolidating BGM to AVP it would be a gross mismanagement of funding to have installed this system only to then either remove it (costing additional funds) or abandon it. Additionally, by moving controller positions from BGM to AVP it will result in an increase of pay as BGM is a level 5 facility and AVP is a level 6 facility. However, if ELM is consolidated into BGM, no additional pay increase is required as the overall level will remain the same.

Finally, the report describes efficiencies that can be realized by the consolidation to AVP such as the required coordination, handoffs, and the increase of service altitudes. BGM currently has the capabilities provide this coverage. However, they do not have the staffing to complete this around the clock. If ELM were consolidated to BGM there would be enough staff to provide all the coverage needed up to 10,000 MSL as discussed in the 804 Consolidation report. Furthermore, this would result in jobs being retained in New York State and those with institutional knowledge of the area providing excellent radar coverage. BGM underwent a terminal renovation, which included the Air Traffic Control facilities, in 2007 and this was not considered, or at least not discussed in the report. It is the desire of BGM to conduct another renovation and therefore continue to modernize our facilities at no additional costs to the tenants.

We ask that you reconsider your consolidation of the TRACON's of BGM and ELM into AVP's facility. It is our desire that you keep the jobs in New York, keep the facilities intact, and review your financial data based on current factors. We understand that the goal of the 804 Consolidation report

is to find cost savings for the Federal Government. If required, we feel that ELM can consolidate to BGM with adequate savings while also keeping jobs in New York. We disagree with the recommendation that BGM's TRACON should be consolidated to Pennsylvania's AVP station and ask for this recommendation to be thrown out.

Thank you for your time and consideration in this very serious matter.

Terry Hebbard

Chief Pilot Raymond Corporation

BGM

I am not in favor of moving these positions out of New York. I think the best option is for the ELM positions to move to BGM. Terry Hebbard

See attached file(s)

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To the Committee Evaluators,

It is my understanding that the FAA's Air Traffic Control's Section 804 Consolidation Report calls for the consolidation of both New York State's BGM and ELM's TRACON facilities to the facility of AVP located in Pennsylvania. We strongly oppose this recommendation based on several factors including employee efficiencies, cost savings, and loss of jobs and payroll.

First and foremost, the notion of the loss of good paying jobs in New York to a neighboring state is unacceptable. From the information we've gathered, both staffs would be roughly reduced by half, meaning that up to 20 jobs would be lost in New York. This could result in over \$1 million being lost in payroll each year for Upstate New York. Furthermore, with the loss of positions, the BGM facility has the potential to be downgraded in the ATC level from a level 5 to level 4 after just a year or two. This would result in a further reduction of payroll and desirability of the position. BGM is also a training facility that would be greatly reduced should the TRACON services be moved to another facility. The 804 Consolidation report discusses cost savings as a major factor in the decision to consolidate BGM to AVP. With some research we have found the financial information used is inherently flawed. The report shows a cost savings ratio of 1.1. However, the report was studied in 2016 prior to the installation of the STARS (Standard Terminal Automation Replacement System) at BGM and ELM. The report cites that by not doing the installation of these systems at our facilities,

money will be saved. We'd like to bring to light that the system installations of the STARS was been completed in April 2018 at BGM. Thus, rendering the cost saving point moot. In fact, we feel that by consolidating BGM to AVP it would be a gross mismanagement of funding to have installed this system only to then either remove it (costing additional funds) or abandon it. Additionally, by moving controller positions from BGM to AVP it will result in an increase of pay as BGM is a level 5 facility and AVP is a level 6 facility. However, if ELM is consolidated into BGM, no additional pay increase is required as the overall level will remain the same. Finally, the report describes efficiencies that can be realized by the consolidation to AVP such as the required coordination, handoffs, and the increase of service altitudes. BGM currently has the capabilities provide this coverage. However, they do not have the staffing to complete this around the clock. If ELM were consolidated to BGM there would be enough staff to provide all the coverage needed up to 10,000 MSL as discussed in the 804 Consolidation report. Furthermore, this would result in jobs being retained in New York State and those with institutional knowledge of the area providing excellent radar coverage. BGM underwent a terminal renovation, which included the Air Traffic Control facilities, in 2007 and this was not considered, or at least not discussed in the report. It is the desire of BGM to conduct another renovation and therefore continue to modernize our facilities at no additional costs to the tenants. We ask that you reconsider your consolidation of the TRACON's of BGM and ELM into AVP's facility. It is our desire that you keep the jobs in New York, keep the facilities intact, and review your financial data based on current factors. We understand that the goal of the 804 Consolidation report is to find cost savings for the Federal Government. If required, we feel that ELM can consolidate to BGM with adequate savings while also keeping jobs in New York. We disagree with the recommendation that BGM's TRACON should be consolidated to Pennsylvania's AVP station and ask for this recommendation to be thrown out.

Thank you for your time and consideration in this very serious matter.

I am writing to state my opposition to docket number FAA-2019-0153, the proposal to relocate TRACON air traffic control from the Greater Binghamton Airport to the Scranton-Wilkes Barre Airport. Not only would this result in a loss of highly-skilled jobs from the facility and the Binghamton area, it would compromise the safety of air travel in and around the Greater Binghamton area. Senator Kirsten Gillibrand has made these points in her appeal to the FAA to reconsider this move (and the same from the Elmira-Corning Airport), and I fully support her efforts. Southern Tier

Jeffrey Fingar

600 Carl St

Endicott, NY 13760-2604

economies have been dealt enough blows over the last twenty years, and this proposal seems unnecessary and (as Senator Gillibrand's research suggests) does not appear to result in any appreciable savings (if any at all). As a concerned citizen and New York state resident and tax payer of over forty years, I respectfully request that docket number FAA-2019-0153 be struck down in the interest of the Southern Tier and New York State economies and public safety. And that other, more reasonable cost saving measures be investigated and implemented. I thank you for your time and consideration. Sincerely,

Jeffrey Fingar 600 Carl Street Endicott, NY 13760

The New York State Department of Transportation (NYSDOT) strongly urges the Federal Aviation Administration (FAA) to reconsider implementing recommendations that would realign the Binghamton (BGM) and Elmira (ELM), New York Terminal Radar Approach Control Facility (TRACON) operations into the Wilkes-Barre/Scranton (AVP), Pennsylvania TRACON and disrupt the lives of many hard-working FAA employees based in New York's Southern Tier.

Ronald Epstein

While it is well understood that the FAA's intent is to comply with the provisions of the 2012 FAA Reauthorization Bill, the cost-benefit analysis used to justify the proposed realignment is incomplete and does not accurately reflect the relevant economic factors. For example, the realignment analysis developed by the FAA does not include the costs of the Standard Terminal Automation Replacement System (STARS) that was installed at BGM and ELM in 2018. The costs of these installations, and their removal or relocation, should be fully incorporated in the FAAs benefit-cost analysis. Furthermore, the realignment assessment does not fully take into account the increases in staffing costs at the higher-level facility; AVP is a level 6 facility, whereas both BGM and ELM are level 5 facilities. Additionally, while relocations of ELM and BGM to Syracuse (SYR) or Rochester (ROC) were referenced, the economic analysis does not provide a full comparison of these options with FAAs preferred alternative.

Most concerning is that the economic analysis conducted by the FAA does not incorporate the significant investments made by the State of New York in both the Greater Binghamton Airport and the Elmira Corning Regional Airport. Over the past five years, Governor Cuomo has invested approximately \$47 million in the renewal and modernization of these facilities. The proposed realignment and removal of the TRACON facilities from the Southern Tier will undermine the positive impacts of these investments and harms the region's economic competitiveness.

In consideration of the detrimental impacts that these TRACON facility relocations will have on the local economies, airports, and communities, the FAA must first present a complete economic justification for the proposed changes. New York is confident that a more comprehensive analysis will result in a different determination that will allow almost two dozen jobs and over \$1 million in payroll to remain in New York State.

I want to personally thank you for your consideration of this request to revisit this proposed realignment and to provide a more comprehensive assessment that fully incorporates all relevant economic factors. If I can provide additional detail pertaining to these comments, please contact me at (518) 441-2585 or ron.epstein@dot.ny.gov.

To the Committee Evaluators,

I strongly urge you to reconsider the consolidation of radar services from BGM and ELM to AVP. The Section 804 process was implemented to reduce costs associated with NextGen by potentially consolidating radar services and reducing the number of facilities that required the necessary radar equipment. However, the Section 804 process was significantly delayed. BGM and ELM already have the upgraded radar systems and are NextGen compatible. The money associated with NextGen has already been invested and cannot be saved. This recommendation does not save any money. The same and more efficiencies and benefits outlined in the case can be achieved in a more cost effective manner.

The business case was evaluated in 2016 and used data from 2014 and earlier. The data and numbers are outdated and do not accurately reflect a cost savings. AVP has already received a facility pay upgrade to level 6. With the combination of BGM and ELM radar services they will receive another pay upgrade to a level 7 facility. This will result in a significant pay increase to over 40 air traffic controllers. Whereas, if ELM radar services were combined to BGM there would be no pay raise involved.

The driving force behind this decision was the age of the facilities involved and that AVP is FAA owned, while BGM leases the facility through Broome County. AVP ATC tower was built in 2012 at a cost of \$20 Million. Facility upkeep, maintenance, and cleaning costs \$50,000 yearly for AVP. BGM tower was built in 1953 but was renovated top to bottom in 2007. The FAA leases all required offices, control tower, and TRACON from Broome County for \$100,000 yearly. This cost includes all of the upkeep,

Jeremy Polhamus

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Binghamton, NY 13903

maintenance, and cleaning costs. The cost to operate BGM, even though it is leased is still significantly cheaper than AVP. Nonetheless, if BGM radar services were consolidated to AVP the BGM tower would still remain operational. The FAA would not save any money. Significantly more money would need to be spent to remote transmit and run fiber optic cables from ELM and BGM to AVP. BGM already has the ELM radar feed and necessary infrastructure to operate ELM radar services. It would be no additional cost to operate the radar services from ELM at BGM.

The workgroup outlines efficiencies in airspace, reduced coordination, 24 hour radar services, and control up to 10,000' MSL by consolidating to AVP. Those same services and benefits can and would be provided by BGM. BGM has the capability of providing those benefits to the airspace of BGM and ELM TODAY, with no cost. Significant investment would be required for AVP to provide those benefits and efficiencies. With the consolidation of BGM and ELM radar services to AVP there would be a loss of approx 20 professional and well paid jobs to the Southern Tier of NY as those positions will be shipped to Wilkes-Barre, PA. This would be a significant loss to our Local economy. If ELM were to consolidate to BGM only 6 jobs would be moved from ELM to BGM. The jobs would stay here in NY and in the Southern Tier. NY cannot afford to lose these safety professionals.

Currently BGM operates as a training facility and a pipeline in the ATC system. BGM has the resources and assets to train and develop new air traffic controllers. Those controllers gain their experience at BGM to prepare them for larger ATC facilities. Those controllers leave BGM with all of the necessary certifications to staff critical facilities such as New York TRACON, New York Center, and other crucial ATC facilities. If BGM were to lose radar services then they would lose their ability to provide the necessary development of new air traffic controllers. This would be a significant loss to the National air traffic controller staffing which is already at a 30 year low.

If BGM and ELM were consolidated to AVP there would be no cost savings. It would in fact cost significantly more when you consider the substantial pay raise for dozens of FAA employees, the required investment to infrastructure, equipment, cables, and radar feed installation. There are no benefits or efficiencies to safety and the ATC system that cannot be achieved by BGM today. We can obtain those same efficiencies and benefits by consolidating ELM to BGM at little to no cost. Consolidating to AVP would result in almost two dozen jobs being shipped across State lines. If ELM

were consolidated to BGM those jobs would stay here in NY and in the Southern Tier where they belong. If BGM and ELM were to consolidate to AVP, AVP would become a larger and more complex facility and would not be an effective training facility for newly hired air traffic controllers. If ELM were to consolidate to BGM, then BGM would be able to continue as a critical training facility for the National Airspace System. I strongly urge the committee to reevaluate their recommendation and consolidate the ELM radar services to BGM.

Thank you for your time,

Jeremy Polhamus

BGM Air Traffic Control Specialist

I strongly support all of the recommendations for facility realignment, especially the consolidation of ELM and BGM TRACONs to AVP.

Anonymous

As is stands today, the amount of traffic at ELM and BGM make it very difficult to justify maintaining TRACON operations there. ELM and BGM airspace could very easily be combined and safely worked by a single air traffic controller. It would also be much more efficient if a single controller worked the airspace because many of the current coordinations between controllers would no longer be necessary, thus reducing controller workload. The airplanes flying in the airspace would also benefit from the reduced inefficiencies that currently exist because control of the airplanes to the final controller could be transferred much sooner and better execution of the controller's plan. Operationally, pilots wouldn't experience any difference in service from what they currently receive. In addition to increased efficiency, this would provide cost saving in payroll since one controller could do the job that currently requires two.

For everyone commenting that these are valuable training facilities, that is laughable. In 2018, BGM was the 3rd slowest airport in terms of aircraft operations among FAA towers. There are many uncontrolled airports that are much busier than BGM. I think that in addition to the TRACON being relocated, the tower should also be shut down. At uncontrolled fields, pilots commonly communicate their position amongst themselves and land safely. BGM averages roughly 2-3 planes per hour. There is no reason why the tower also shouldn't be shut down. What makes a facility good for training is consistent traffic that can allow trainees an opportunity to train and learn everyday. The only way to learn air traffic control is to talk to airplanes and the lack of traffic at BGM is easily the biggest to training new controllers. ELM is a little busier than BGM but by much.

Local politicians saying that it is unacceptable to lose jobs in these regions is expected. They have to say these things to attempt to please their constituents. However, it is because of state and local policies that ELM and BGM airports have experienced a steady downtrend in traffic for the last 20 years. High local and state taxes have driven a declining population in upstate New York and as a result, the areas are struggling economically. People already drive out of their way to fly out of AVP or SYR because it is often times more cost effective to do so. BGM airport is operating in the red, averaging about \$1 million in losses per year for Broome county tax payers. That number is expected to increase moving forward and is completely unsustainable.

In closing, I not only think that the consolidation should continue as recommended, but I believe that the process should be expedited. Thank you for your time and consideration in this very important matter.

HUF COMMENTS

How does a negative business case optimize assets of the FAA and the taxpayer? The numbers being used were also prior to the installation of the STARS equipment at Terre Haute. Terre Haute Regional Airport has been NextGen enabled as of March 2018 with STARS. The Indianapolis ASR can not cover HUF effectively (ASR range is limited to 60 NM), this will not provide coverage to the ground at HUF. Due to this limitation the ASR at HUF will need to be maintained to provide safety needed for both the tower and approach control services. As far as the weather presentation HUF can display 5 levels at the current time. With the HUF traffic count being fairly high and raising 6%-8% per year I dont believe this is a good move. Terre Haute Regional Airport has the Indiana State University Flight Academy with a high demand for Instrument approaches required and now have the Lift Academy coming from Indianapolis to Terre Haute (HUF) for approaches as well. Why is Terre Haute the only facility with a negative impact study to be recommended for re-alignment?

Jeff Hauser

7377 N Haywood Farms Rd

Brazil, IN 47834

The building at HUF is not maintained by FAA, it is maintained by Airport Authority. The only FAA responsibility is their equipment. How does a negative business case optimize the assets of the FAA? Is this considered fraud, waste and abuse? HUF weather presentation is adequate (can display 5 levels). HUF is NextGen enabled as of March 2018 with STARS. IND ASR cannot cover HUF airspace effectively (ASR range is limited to 60NM), this will not provide coverage to the ground at HUF. Hence the HUF ASR will need to be maintained to provide the safety needed for both Tower and Approach Control services. This is again, more expensive not shown in the report. The IND TRACON would be the only one that would benefit from

Melanie Abel

This report is not accurate and does not have the tax payers best interests in mind in Indiana. The cost of moving HUF tracon exceeds that of keeping. Its that simple. The taxpayers deserve transparency and the FAA and AOPA are not providing that.	I erre Haute, IN 47803 Elliot Abel
The report is inaccurate and outdated. The cost of moving HUF is costly and the adverse affects to the flight training conducted at this airfield have not been addressed. This airport is the third busiest in the state of Indiana, and the traffic numbers used are outdated and are not correct. HUF has been recently upgraded to STARS a little over 12 months ago, which also is not	Kara McIntosh 581 S. Airport St Terre Haute,
higher priority of restoration. If the equipment is critical to the Tower what would be the restoration time? Same as it is now! No benefit to the users as the STARS upgraded has made outages far less likely. Traffic count numbers are based on 2016 numbers and HUF has been growing. Traffic is up about 6-8% year over year. Negative business cases at others in Section 804 are not recommended for realignment, why is HUF? Is IND Approach doing something political and not being 100% forthcoming with the public? Negative effects of moving HUF to IND will not provide services as they are now. IND is unable to handle the traffic that they have now (restricting LIFT Flight Academy during certain times of the day to no arrivals and departures). Purdue, Lift, ISU, ATP, general public, all require simultaneous operations into HUF. IND will not be able to provide. Will not allow touch and goes at IND as they say they are too busy. 141 flight schools have only been growing in size and HUF is ever gaining more operations that will require approach to remain at HUF. The aviation industry requires it, and the public deserves the best trained pilots and controllers for public safety. Moving approach to IND is a safety hazard for pilots and the general public that they fly above.	